SCIENCE

Author Index to Volume 212
April–June 1981

Published by the
American Association for the Advancement of Science
1515 Massachusetts Avenue, NW, Washington, D.C. 20005

A

Aaronson, Stuart A. *See* Nagao, Kenji.
Abel, Ernest L.; Bush, Renee; Dintcheff, Barbara A.: Exposure of rats to alcohol in utero alters drug sensitivity in adulthood. v212 p1531–1533 26 June 81.
Abelson, Philip H. (editorials): Coal research. v212 p1341 19 June 81. Gordon Research Conferences. v212 p401 24 Apr 81. President Reagan, science, and engineering. v212 p987 29 May 81. Progress toward energy independence. v212 p615 8 May 81. Voyager mission to Saturn. v212 p125 10 Apr 81.
Able, Kenneth P. *See* Gould, James L.
Acuña, Mario H. *See* Ness, Norman F.
Adams, Robert J. *See* Winkelstein, Jerry A.
Adams, Robert McC.: review of *The Dying Community*, edited by Art Gallaher, Jr., and Harland Padfield. v212 p1380–1381 19 June 81.
Adelman, John. *See* Lawn, Richard M.
Adelstein, S. James. *See* Bloomer, William D.
Adler, Martin W. *See* Beckman, Alexander L.
Aikawa, Masamichi. *See* Smith, Ronald D.
Alavi, A. *See* Greenberg, J. H.
Alberte, Randall S.: review of *Adaptation of Plants to Water and High Temperature Stress*, edited by Neil C. Turner and Paul J. Kramer. v212 p796 15 May 81.
Aldrich, Michele: Puerto Rican scientists call for new organization and reforms in science education (AAAS). v212 p1132–1133 5 June 81.
Aldridge, Bill G.: National Science Foundation's other mission (editorial). v212 p9 3 Apr 81.
Alexander, J. K. *See* Warwick, J. W.
Alexander, Martin. *See* Bartholomew, Gene W.
Alger, B. E. *See* Nicoll, R. A.
Allison, M. *See* Hanel, R.
Allison, Milton J. and Cook, Herbert M.: Oxalate degradation by microbes of the large bowel of herbivores: the effect of dietary oxalate. v212 p675–676 8 May 81.
Alper, Joseph. *See* Engelman, Edward.
Altura, Bella T. and Altura, Burton M.: Phencyclidine, lysergic acid diethylamide, and mescaline: cerebral artery spasms and hallucinogenic activity. v212 p1051–1052 29 May 81.
Altura, Burton M. *See* Altura, Bella T.
Ancker-Johnson, Betsy: Auto safety (letter). v212 p610, 612 8 May 81.
Andersen, Susan M. *See* Zimbardo, Philip G.
Anderson, J. D. *See* Tyler, G. L.
Anderson, Marvin D. *See* Brown, Gregory G.
Antin, Parker B. *See* Bennett, Gudrun S.
Aoki, Takashi and Weber, George: Carbamoyl phosphate synthetase (glutamine-hydrolyzing): increased activity in cancer cells. v212 p463–465 24 Apr 81.
Armstrong, T. P. *See* Johnson, R. E. *See also* Krimigis, S. M.
Asano, Shinsuke. *See* Bloom, Justin L.
Ashmole, N. Philip: review of *Behavior of Marine Animals*, edited by Joanna Burger, Bori L. Olla, and Howard E. Winn. v212 p156 10 Apr 81.
Asin, Karen E. *See* Davis, John D.
Atreya, S. K. *See* Broadfoot, A. L.
Austin, P. R.; Brine, C. J.; Castle, J. E.; Zikakis, J. P.: Chitin: new facets of research. v212 p749–753 15 May 81.
Axford, W. I. *See* Krimigis, S. M.

B

Bagenal, F. *See* Bridge, H. S.
Baggott, James: Koop's candidacy (letter). v212 p1214 12 June 81.
Baile, Clifton A. *See* Della-Fera, Mary Anne.
Balliett, Lisa. *See* Pimentel, David.
Balzer, Harley: review of *The Social Context of Soviet Science*, edited by Linda L. Lubrano and Susan Gross Solomon. v212 p1379–1380 19 June 81.
Bandurraga, Maury M. *See* Fenical, William.
Barcellona, Wayne J. *See* Britton, Joseph C.
Barchilon, John: Social science budget cuts (letter). v212 p396 24 Apr 81.
Barker, Jeffery L. and Mathers, David A.: GABA analogues activate channels of different duration on cultured mouse spinal neurons. v212 p358–361 17 Apr 81.
Barnett, Jimmy W. *See* Drach, John C.
Barrett, J. Carl; Wong, Annette; McLachlan, John A.: Diethylstilbestrol induces neoplastic transformation without measurable gene mutation at two loci. v212 p1402–1404 19 June 81.
Barron, Eric J.; Thompson, Starley L.; Schneider, Stephen H.: An ice-free Cretaceous? Results from climate model simulations. v212 p501–508 1 May 81.
Barrow, C. H. *See* Warwick, J. W.
Bartholomew, Gene W. and Alexander, Martin: Soil as a sink for atmospheric carbon monoxide. v212 p1389–1391 19 June 81.
Bascom, Willard: Bridge design (letter). v212 p1339 19 June 81.
Bass, Andrew H. *See* Hopkins, Carl D.
Basu, A. R.; Ray, S. L.; Saha, A. K.; Sarkar, S. N.: Eastern Indian 3800-million-year-old crust and early mantle differentiation. v212 p1502–1506 26 June 81.
Baudry, Michel; Bundman, Marsha C.; Smith, Elizabeth K.; Lynch, Gary S.: Micromolar calcium stimulates proteolysis and glutamate binding in rat brain synaptic membranes. v212 p937–938 22 May 81.
Beamer, Wesley G.; Eicher, Eva M.; Maltais, Lois J.; Southard, Janice L.: Inherited primary hypothyroidism in mice. v212 p61–63 3 Apr 81.
Becker, Patricia T. and Thoman, Evelyn B.: Rapid eye movement storms in infants: rate of occurrence at 6 months predicts mental development at 1 year. v212 p1415–1416 19 June 81.
Beckman, Alexander L.; Llados-Eckman, Carmen; Stanton, Toni L.; Adler, Martin W.: Physical dependence on morphine fails to develop during the hibernating state. v212 p1527–1529 26 June 81.
Beckwith, Jonathan. *See* Engelman, Edward.
Beebe, Reta. *See* Smith, Bradford A.
Behannon, Kenneth W. *See* Ness, Norman F.
Belcher, J. W. *See* Bridge, H. S.
Belisle, Jon: Organic fluorine in human serum: natural versus industrial sources. v212 p1509–1510 26 June 81.
Bell, S. J. *See* Sudmeier, J. L.
Benacerraf, Baruj: Role of MHC gene products in immune regulation. v212 p1229–1238 12 June 81.
Benbow, Camilla Persson and Stanley, Julian C.: Mathematical ability: is sex a factor? (letter). v212 p118, 121 10 Apr 81.
Bennett, Gudrun S.; Tapscott, Stephen J.; Kleinbart, Fredric A.; Antin, Parker B.; Holtzer, Howard: Different proteins associated with 10-nanometer filaments in cultured chick neurons and nonneuronal cells. v212 p567–569 1 May 81.
Berelowitz, Michael; Szabo, Marta; Frohman, Lawrence A.; Firestone, Susan; Chu, Lily; Hintz, Raymond L.: Somatomedin-C mediates growth hormone negative feedback by effects on both the hypothalamus and the pituitary. v212 p1279–1281 12 June 81.
Berenbaum, May and Feeny, Paul: Toxicity of angular furanocoumarins to swallowtail butterflies: escalation in a coevolutionary arms race? v212 p927–929 22 May 81.
Berns, Michael W.: Alternative to peer review? (letter). v212 p1337–1338 19 June 81.
Berson, Eliot L. *See* Sandberg, Michael A.
Bertaux, J. L. *See* Broadfoot, A. L.
Berthold, Peter and Querner, Ulrich: Genetic basis of migratory behavior in European warblers. v212 p77–79 3 Apr 81.
Bezdek, Roger H. and Taylor, William B., Jr.: Allocating petroleum products during oil supply disruptions. v212 p1357–1363 19 June 81.
Bickham, John W.: Two-hundred-million-year-old chromosomes: deceleration of the rate of karyotypic evolution in turtles. v212 p1291–1293 12 June 81.
Bird, J. *See* Turner, C. G., II.
Birnbaum, Howard K.: Alternative to peer review? (letter). v212 p1337 19 June 81.
Bitzer, A. M. *See* Dvorak, H. F.
Blair, D. G.; Oskarsson, M.; Wood, T. G.; McClements, W. L.; Fischinger, P. J.; Vande Woude, G. G.: Activation of the transforming potential of a normal cell sequence: a molecular model for oncogenesis. v212 p941–943 22 May 81.
Blake, R. *See* Leguire, L. E.
Blakemore, R. P. *See* Frankel, R. B.
Blamont, J. E. *See* Broadfoot, A. L.
Blank, Nathan K. *See* Seil, Fredrick J.
Blaszczyk, Magdalena. *See* Magnani, John L.
Bloom, Justin L. and Asano, Shinsuke: Tsukuba Science City: Japan tries planned innovation. v212 p1239–1247 12 June 81.
Bloomer, William D.; McLaughlin, William H.; Neirinckx, Rudi D.; Adelstein, S. James;

Gordon, Phillip R.; Ruth, Thomas J.; Wolf, Alfred P.: Astatine-211–tellurium radiocolloid cures experimental malignant ascites. v212 p340–341 17 Apr 81.
Blum, Murray S. *See* Fletcher, David J. C.
Bodznick, David and Northcutt, R. Glenn: Electroreception in lampreys: evidence that the earliest vertebrates were electroreceptive. v212 p465–467 24 Apr 81.
Boischot, A. *See* Warwick, J. W.
Boland, W. *See* Müller, D. G.
Boni, L. T. *See* Hui, S. W.
Bonnichsen, Robson. *See* Stanford, Dennis.
Bostock, Richard M.; Kuc, Joseph A.; Laine, Roger A.: Eicosapentaenoic and arachidonic acids from *Phytophthora infestans* elicit fungitoxic sesquiterpenes in the potato. v212 p67–69 3 Apr 81.
Bostrom, C. O. *See* Krimigis, S. M.
Bouchard, Thomas J., Jr., and McGue, Matthew: Familial studies of intelligence: a review. v212 p1055–1059 29 May 81.
Bovée, K. C.; Bush, M.; Dietz, J.; Jezyk, P.; Segal, S.: Cystinuria in the maned wolf of South America. v212 p919–920 22 May 81.
Boveng, Peter. *See* Pimentel, David.
Boyce, Joseph. *See* Smith, Bradford A.
Brain, Jeffrey P.: review of *Florida Archaeology*, by Jerald T. Milanich and Charles H. Fairbanks. v212 p1495–1496 26 June 81.
Branscomb, Lewis M.: National Science Foundation budget: fiscal years 1981, 1982, and beyond. v212 p514–516 1 May 81. Research equipment acquisition (editorial). v212 p877 22 May 81.
Braun, R. J. *See* Resnick, M. A.
Brickman, Ronald J.: review of *Scientists in Whitehall*, by Philip Gummett. v212 p774–775 15 May 81.
Bridge, H. S.; Belcher, J. W.; Lazarus, A. J.; Olbert, S.; Sullivan, J. D.; Bagenal, F.; Gazis, P. R.; Hartle, R. E.; Ogilvie, K. W.; Scudder, J. D.; Sittler, E. C.; Eviatar, A.; Siscoe, G. L.; Goertz, C. K.; Vasyliunas, V. M.: Plasma observations near Saturn: initial results from Voyager 1. v212 p217–224 10 Apr 81.
Brief, Deborah. *See* Davis, John D.
Briggs, Geoffery. *See* Smith, Bradford A.
Briggs, Jonathan; Elings, Virgil B.; Nicoli, David F.: Homogeneous fluorescent immunoassay. v212 p1266–1267 12 June 81.
Brine, C. J. *See* Austin, P. R.
Britton, Joseph C.; Barcellona, Wayne J.; Hagan, John; LaGrone, Mark L.: Ctenidial autotomy in *Corbicula fluminea* in response to massive granulomas. v212 p551–553 1 May 81.
Broad, William J. (news and comment): . . . But Straus defends himself in Boston. v212 p1367–1369 19 June 81. Congress told fraud issue "exaggerated." v212 p421 24 Apr 81. Court gives blessing to hospital of faith healer. v212 p905 22 May 81. False alerts and faulty computers. v212 p1123 5 June 81. Fraud and the structure of science. v212 p137–141 10 Apr 81. Nuclear pulse (I): awakening to the chaos factor. v212 p1009–1012 29 May 81. Nuclear pulse (II): ensuring delivery of the doomsday signal. v212 p1116–1120 5 June 81. Nuclear pulse (III): playing a wild card. v212 p1248–1251 12 June 81. The perils of Isabelle: under the budget ax. v212 p525 1 May 81. Yale adopts plan to handle charges of fraud. v212 p311 17 Apr 81.
Broadfoot, A. L.; Sandel, B. R.; Shemansky, D. E.; Holberg, J. B.; Smith, G. R.; Strobel, D. F.; McConnell, J. C.; Kumar, S.; Hunten, D. M.; Atreya, S. K.; Donahue, T. M.; Moos, H. W.; Bertaux, J. L.; Blamont, J. E.; Pomphrey, R. B.; Linick, S.: Extreme ultraviolet observations from Voyager 1 encounter with Saturn. v212 p206–211 10 Apr 81.
Brockhaus, Manfred. *See* Magnani, John L.
Brown, Gregory G.; Preisman, Richard C.; Anderson, Marvin D.; Nixon, Robert K.; Isbister, John L.; Price, Harold A.: Memory performance of chemical workers exposed to polybrominated biphenyls. v212 p1413–1415 19 June 81.
Brown, Kenneth T.: Indirect costs of federally supported research. v212 p411–418 24 Apr 81.
Brown, Laurie M.: review of *From X-Rays to Quarks*, by Emilio Segrè. v212 p782–783 15 May 81.
Brown, Michael S.; Kovanen, Petri T.; Goldstein, Joseph L.: Regulation of plasma cholesterol by lipoprotein receptors. v212 p628–635 8 May 81.
Brown, Olen R.; Heitkamp, Michael; Song, Cheng-Shu: Niacin reduces paraquat toxicity in rats. v212 p1510–1512 26 June 81.
Brown, R. D. *See* Youatt, J. B.
Brown, W. L. *See* Johnson, R. E.
Brownstein, Michael J.: review of *Peptides*, edited by Floyd E. Bloom. v212 p320 17 Apr 81.
Brunner, Robert L.; Vorhees, Charles V.; Butcher, Richard E.: Food colors and behavior (technical comment). v212 p578–579 1 May 81.
Brussard, Peter F. *See* Townsend, Daniel S.
Bryant, Peter J. *See* Bryant, Susan V.
Bryant, Susan V.; French, Vernon; Bryant, Peter J.: Distal regeneration and symmetry. v212 p993–1002 29 May 81.
Buddemeier, Robert M.: Least publishable unit (letter). v212 p494 1 May 81.
Buhl, David. *See* Mumma, Michael J.
Bukantis, Robert. *See* Pimentel, David.
Bulloch, A. G. M. and Kater, S. B.: Selection of a novel connection by adult molluscan neurons. v212 p79–81 3 Apr 81.
Bundman, Marsha C. *See* Baudry, Michel.
Bunker, Anne. *See* Smith, Bradford A.
Burke, William L.: review of *The Large-Scale Structure of the Universe*, by J. E. Peebles. v212 p38–39 3 Apr 81.
Burlaga, Leonard F. *See* Ness, Norman F.
Burnett, William S. *See* Janerich, Dwight T.
Buseck, Peter R. *See* Smith, Piers P. K. *See also* Turner, Shirley.
Bush, M. *See* Bovée, K. C.
Bush, Renne. *See* Abel, Ernest L.
Busse, Curt and Hamilton, William J., III: Infant carrying by male chacma baboons. v212 p1281–1283 12 June 81.
Butcher, Richard E. *See* Brunner, Robert L.
Butler, Robert F. *See* Marshall, Larry G.
Byers, John: review of *Animal Play Behavior*, by Robert Fagen. v212 p1493–1494 26 June 1981.
Byrne, Sharon T. *See* Kaplan, Ann E.
Byskov, Anne Grete and Grinsted, Jørgen: Feminizing effect of mesonephros on cultured differentiating mouse gonads and ducts. v212 p817–818 15 May 81.

C

Cade, William H.: Alternative male strategies: genetic differences in crickets. v212 p563–564 1 May 81.
Cambier, Jean. *See* Willer, Jean Claude.
Cameron, J. A. *See* Geary, Steven J.
Campbell, Carlos C. *See* Nguyen-Dinh, Phuc.
Capell, Howard. *See* Zilm, Duane H.
Carbary, J. F. *See* Krimigis, S. M.
Carey, William D. (editorials): Affordable science. v212 p497 1 May 81. Charting a course for science. v212 p1455 26 June 81. Science policy and Congress. v212 p741 15 May 81.
Carlson, Richard W.: review of *The Continental Crust and Its Mineral Deposits*, edited by D. W. Strangway. v212 p1020 29 May 81.
Carr, Michael. *See* Smith, Bradford A.
Carr, T. D. *See* Warwick, J. W.
Carrell, Thomas D. *See* Remez, Robert E.
Carter, C. Sue. *See* Diuzen, Dean E.
Carvalho, A. C. *See* Dvorak, H. F.
Cassidy, Joseph D. *See* King, Robert C.
Cassinelli, Joseph P.; Mathis, John S.; Savage, Blair D.: Central object of the 30 Doradus Nebula, a supermassive star. v212 p1497–1501 26 June 81.
Castle, J. E. *See* Austin, P. R.
Cavanagh, Patrick. *See* Favreau, Olga Eizner.
Chalip, Laurence: Applied social science (letter). v212 p1449 26 June 81.
Chalk, Rosemary A.: Ethics Project completes report (AAAS). v212 p1131 5 June 81.
Chandrabose, Kuttikkat A.; Cuatrecasas, Pedro; Pottathil, Raveendran; Lang, David J.: Interferon-resistant cell line lacks fatty acid cyclooxygenase activity. v212 p329–331 17 Apr 81.
Chang, Jaw-Kang. *See* Chang, Kwen-Jen.
Chang, Kwen-Jen; Killian, Anthony; Hazum, Eli; Cuatrecasas, Pedro; Chang, Jaw-Kang: Morphiceptin (NH_4-Tyr-Pro-Phe-Pro-$CONH_2$): a potent and specific agonist for morphine (μ) receptors. v212 p75–77 3 Apr 81.
Chasko, Joseph H. *See* Parks, Norris J.
Chaudhari, Praveen. *See* Feder, Ralph.
Chenette, D. L. *See* Vogt, R. E.
Chin, Gordon. *See* Mumma, Michael J.
Chipman, Susan: Mathematical ability: is sex a factor? (letter). v212 p114, 116 10 Apr 81.
Christman, D. *See* Greenberg, J. H.
Christy, Nicholas P.: Startling !punctuation (letter). v212 p494–495 1 May 81.
Chu, C. W. *See* Diatschenko, V.
Chu, Lily. *See* Berelowitz, Michael.
Chung, J. *See* Streuli, R. A.
Cicone, Bruce. *See* Honn, Kenneth V.
Clark, Colleen, J. G. and Clark, John R.: University research and DOD (letter). v212 p1446 26 June 81.
Clark, David L. and Kitchell, Jennifer: Terminal Cretaceous extinctions and the Arctic spillover model (technical comment). v212 p577 1 May 81.
Clark, John R. *See* Clark, Colleen J. G.
Cleveland, Cutler. *See* Pimentel, David.
Cleveland, Jess M. and Rees, Terry F.: Characterization of plutonium in Maxey Flats radioactive trench leachates. v212 p1506–1509 26 June 81.
Cole, Blaine J.: Dominance hierarchies in *Leptothorax* ants. v212 p83–84 3 Apr 81.
Cole, James J. *See* McCann, Frances V.
Cole, R. David: review of *Gene Expression*, by Benjamin Lewin. v212 p914 22 May 81.
Collins, Stewart A. *See* Smith, Bradford A.
Collins, William E. *See* Nguyen-Dinh, Phuc.
Conlay, Lydia A.; Maher, Timothy J.; Wurtman, Richard J.: Tyrosine increases blood pressure in hypotensive rats. v212 p559–560 1 May 81.
Connerney, John E. P. *See* Ness, Norman F.
Conrath, B. *See* Hanel, R.
Cook, Allen F., II. *See* Smith, Bradford A.
Cook, Herbert M. *See* Allison, Milton J.
Cook, Mary R. *See* Waid, William M.
Cooke, H. B. S.: review of *Pleistocene Mammals of North America*, by Björn Kurtén and Elaine Anderson. v212 p800–801 15 May 81.
Cooke, Nancy E. *See* Owerbach, David.
Cork, Linda Collins. *See* Winkelstein, Jerry A.
Cornillon, Peter. *See* Mollo-Christensen, Erik.
Corson, D. Wesley. *See* Fein, Alan.
Cory, Jack. *See* Tully, Joseph G.
Costa, Jonathan L. *See* Feder, Ralph.
Coull, Bruce C. and Grant, Jonathan: Encystment discovered in a marine copepod. v212 p342–344 17 Apr 81.
Crawford, William R. and Osborn, Thomas R.: Control of equatorial ocean currents by turbulent dissipation. v212 p539–540 1 May 81.
Crews, David: review of *Estrogens and Brain Function*, by Donald W. Pfaff. v212 p802–803 15 May 81.
Croft, T. A. *See* Tyler, G. L.
Cronin, James W.: CP symmetry violation: the search for its origin. v212 p1221–1228 12 June 81.
Crow, James F. and Denniston, Carter: The mutation component of genetic damage. v212 p888–893 22 May 81.
Crowe, Michael J.: review of *Sir William Rowan Hamilton*, by Thomas L. Hankins. v212 p778–779 15 May 81.

Cruikshank, D. *See* Hanel, R.
Crystal, R. G. *See* Hunninghake, G. W.
Cuatrecasas, Pedro. *See* Chandrabose, Kuttikkat A. *See also* Chang, Kwen-Jen.
Culliton, Barbara J.: Kean *v.* AAAS settled out of court (news and comment). v212 p1122 5 June 81.
Culver, Paul. *See* Fenical, William.
Cummings, A. C. *See* Vogt, R. E.
Cummins, H. Z. *See* Frost, James.
Curtis, Garniss H. *See* Marshall, Larry G. *See also* Zinsmeister, William J.
Cuzzi, Jeffrey. *See* Smith, Bradford A.

D

Daigne, G. *See* Warwick, J. W.
Damp, Jonathan E.; Pearsall, Deborah M.; Kaplan, Lawrence T.: Beans for Valdivia. v212 p811–812 15 May 81.
Daniels, D. W. *See* Nelson-Rees, W. A.
Danielson, G. Edward. *See* Smith, Bradford A.
Dann, R. *See* Greenberg, J. H.
Danon, J. *See* Frankel, R. B.
Daub, Edward E.: review of *The Tragicomical History of Thermodynamics, 1822–1854*, by C. Truesdell. v212 p783–784 15 May 81.
Dauben, Joseph W.: review of *Peano*, by Hubert C. Kennedy. v212 p779–780 15 May 81.
Davidson, J. M. *See* Hunninghake, G. W.
Davies, Merton E. *See* Smith, Bradford A.
Davis, John D.; Wirtshafter, David; Asin, Karen E.; Brief, Deborah: Sustained intracerebroventricular infusion of brain fuels reduces body weight and food intake in rats. v212 p81–83 3 Apr 81.
Davis, Kingsley: Population growth and energy use (letter). v212 p282–283 17 Apr 81.
Davis, T. E. *See* Straughan, I. R.
Dawes, Robyn M.: Depression study (letter). v212 p986 29 May 81.
Dawid, Igor B. *See* Wahli, Walter.
De La Baume, Sophie. *See* Patey, Gilles.
Dean, Ann; Erard, Francois; Schneider, Arthur B.; Schechter, Alan N.: Induction of hemoglobin accumulation in human K562 cells by hemin is reversible. v212 p459–461 24 Apr 81.
Dean, D. A. *See* Stek, M., Jr.
Dehen, Henri. *See* Willer, Jean Claude.
DeLayre, Jean L.; Ingwall, Joanne S.; Malloy, Craig; Fossel, Eric T.: Gated sodium-23 nuclear magnetic resonance images of an isolated perfused working rat heart. v212 p935–936 22 May 81.
Della-Fera, Mary Anne; Baile, Clifton A.; Schneider, Bruce S.; Grinker, Joel A.: Cholecystokin antibody injected in cerebral ventricles stimulates feeding in sheep. v212 p687–689 8 May 81.
Deming, Drake. *See* Mumma, Michael J.
Denniston, Carter. *See* Crow, James F.
Desch, M. D. *See* Warwick, J. W.
Deutsch, J. A. *See* Gonzalez, M. F.
Devenport, Jill A. *See* Devenport, Lynn D.
Devenport, Lynn D.; Devenport, Jill A.; Holloway, Frank A.: Reward-induced stereotypy: modulation by the hippocampus. v212 p1288–1289 12 June 81.
Devreotes, P. N. *See* Tomchik, K. J.
Diatschenko, V. and Chu, C. W.: Melting of normal hydrogen under high pressures between 20 and 300 Kelvins. v212 p1393–1394 19 June 81.
Dietz, J. *See* Bovée, K. C.
DiMauro, Salvatore; Miranda, Armand F.; Khan, Shahnaz; Gitlin, Kevin; Friedman, Robert: Human muscle phosphoglycerate mutase deficiency: newly discovered metabolic myopathy. v212 p1277–1279 12 June 81.
Dincauze, Dena F.: review of *The Archaeology of New England*, by Dean R. Snow. v212 p1140–1141 5 June 81.
Dintcheff, Barbara A. *See* Abel, Ernest L.
Dluzen, Dean E.; Ramirez, Victor D.; Carter, C. Sue; Getz, Lowell L.: Male vole urine changes luteinizing hormone–releasing hormone and norepinephrine in female olfactory bulb. v212 p573–575 1 May 81.
Donahue, T. M. *See* Broadfoot, A. L.
Donahue, Thomas F.; Farabaugh, Philip J.; Fink, Gerald R.: Suppressible four-base glycine and proline codons in yeast. v212 p455–457 24 Apr 81.
Donchin, Emanuel. *See* Marshall, Noel K.
Doolittle, Russell F. *See* Laudano, Andrew P.
Douglas, Robert G. *See* Woodruff, Fay.
Downing, J. Scott. *See* Downing, Stephen W.
Downing, Stephen W.; Spitzer, Robert H.; Salo, Wilmar L.; Downing, J. Scott; Saidel, Leo J.; Koch, Elizabeth A.: Threads in the hagfish slime gland thread cells: organization, biochemical features, and length. v212 p326–328 17 Apr 81.
Drach, John C.; Thomas, Mark A.; Barnett, Jimmy W.; Smith, Sandra H.; Shipman, Charles, Jr.: Tritiated thymidine incorporation does not measure DNA synthesis in ribavirin-treated human cells. v212 p549–551 1 May 81.
Drake, Robert E. *See* Marshall, Larry G. *See also* Zinsmeister, William J.
Du Pasquier, L. *See* Hengartner, H.
Duffy, Charles; Teyler, Timothy J.; Shashoua, Victor E.: Long-term potentiation in the hippocampal slice: evidence for stimulated secretion of newly synthesized proteins. v212 p1148–1151 5 June 81.
Dull, Thomas J. *See* Lawn, Richard M.
Dunn, John R. *See* Sloane, Bonnie F.
Dunn, M. F. *See* Sudmeier, J. L.
Dvorak, A. M. *See* Dvorak, H. F.
Dvorak, H. F.; Quay, S. C.; Orenstein, N. S.; Dvorak, A. M.; Hahn, P.; Bitzer, A. M.; Carvalho, A. C.: Tumor shedding and coagulation. v212 p923–924 22 May 81.
Dwyer, Dennis M. *See* Gottlieb, Michael.
Dym, Martin: Gossypol: effect on testosterone (letter). v212 p986 29 May 81.
Dyson, Stephen L.: review of *Culture Contact and Culture Change*, by Peter S. Wells. v212 p1261–1262 12 June 81.

E

Easter, Stephen S., Jr.: Alternative to peer review? (letter). v212 p1337 19 June 81.
Echelle, Anthony A. and Mosier, Doyle T.: All-female fish: a cryptic species of Aluredia (Atherinidae). v212 p1411–1413 19 June 81.
Echteler, Stephen M. and Saidel, William M.: Forebrain connections in the goldfish support telencephalic homologies with land vertebrates. v212 p683–685 8 May 81.
Eckholm, Eric: U.N. conference on new and renewable energy (editorial). v212 p1089 5 June 81.
Editorial note concerning News and Comment stories by Mark Bloom, "The Pahlavi problem: a superficial diagnosis brought the Shah into the United States" (v207 p282 27 Jan 80) and by Nicholas Wade, "French doctors claim Shah had wrong treatment" (v209 p1000 29 Aug 80). v212 p1004 29 May 81.
Edsall, John T.: Two aspects of scientific responsibility. v212 p11–14 3 Apr 81.
Effron, Marc H. *See* Sandberg, Michael A.
Ehrlich, Melanie and Wang, Richard Y.-H.: 5-Methylcytosine in eukaryotic DNA. v212 p1350–1357 19 June 81.
Eicher, Eva M. *See* Beamer, Wesley G.
Eldredge, Niles: Evolution and prediction (letter). v212 p737 15 May 81.
Elings, Virgil B. *See* Briggs, Jonathan.
Elseewi, A. A. *See* Straughan, I. R.
El-Torkey, Nabil M. *See* Kaplan, Ann E.
Engelman, Edward; Alper, Joseph; Leibowitz, Lila; Beckwith, Jonathan; Levine, Regina; Leeds, Anthony: Mathematical ability: is sex a factor? (letter). v212 p116 10 Apr 81.
Epstein, Robert; Lanza, Robert P.; Skinner, B. F.: "Self-awareness" in the pigeon. v212 p695–696 8 May 81.
Erard, Francois. *See* Dean, Ann.
Eshleman, V. R. *See* Tyler, G. L.
Eskay, R. L.; Furness, J. F.; Long, R. T.: Substance P activity in the bullfrog retina: localization and identification in several vertebrate species. v212 p1049–1051 29 May 81.
Espenak, Fred. *See* Mumma, Michael J.
Esquivel, D. M. S. *See* Frankel, R. B.
Evans, C. A. *See* Wheeler, A. P.
Evans, D. R. *See* Warwick, J. W.
Evans, Michael L. *See* Mulkey, Timothy J.
Eviatar, A. *See* Bridge, H. S.

F

Faber, Donald S. *See* Kaars, Charles.
Fairchild, Lincoln: Mate selection and behavioral thermoregulation in Fowler's toads. v212 p950–951 22 May 81.
Farabaugh, Philip J. *See* Donahue, Thomas F.
Farber, Ira C. *See* Grinvald, Amiram.
Farber, John L. *See* Schanne, Francis A. X.
Farrand, William R.: review of *Prehistory of the Eastern Sahara*, by Fred Wendorf and Romuald Schild and *The Sahara and the Nile*, edited by Martin A. J. Williams and Hugues Faure. v212 p911–912 22 May 81.
Fast, Sarah. *See* Pimentel, David.
Favreau, Olga Eizner and Cavanagh, Patrick: Color and luminance: independent frequency shifts. v212 p831–832 15 May 81.
Feck, Gerald. *See* Janerich, Dwight T.
Feder, Martin E.: review of *The Evolution of Air Breathing in Vertebrates*, by David J. Randall, Warren W. Burggren, Anthony P. Farrell, and M. Stephen Haswell. v212 p801–802 15 May 81.
Feder, Ralph; Costa, Jonathan L.; Chaudhari, Praveen; Sayre, David: Improved detail in biological soft x-ray microscopy: study of blood platelets. v212 p1398–1400 19 June 81.
Feeny, Paul. *See* Berenbaum, May.
Fein, Alan and Corson, D. Wesley: Excitation of *Limulus* photoreceptors by vanadate and by a hydrolysis-resistant analog of guanosine triphosphate. v212 p555–557 1 May 81.
Feldman, Jerry F. *See* Nakashima, Hideaki.
Fenical, William; Okuda, Roy K.; Bandurraga, Maury M.; Culver, Paul; Jacobs, Robert S.: Lophotoxin: a novel neuromuscular toxin from Pacific sea whips of the genus *Lophogorgia*. v212 p1512–1514 26 June 81.
Fetz, Eberhard E. *See* Fried, Itzhak.
Fibiger, H. C. *See* Spyraki, C.
Fields, Bernard N. *See* Wolf, Jacqueline L.
Finberg, Robert. *See* Wolf, Jacqueline L.
Fink, Gerald R. *See* Donahue, Thomas F.
Firestone, Susan. *See* Berelowitz, Michael.
Fischinger, P. J. *See* Blair, D. G.
Fitch, Val L.: The discovery of charge conjugation–parity asymmetry. v212 p989–993 29 May 81.
Flandermeyer, R. R. *See* Nelson-Rees, W. A.
Flasar, F. M. *See* Hanel, R.
Fleming, Michael W. *See* Harder, John D.
Fletcher, David J. C. and Blum, Murray S.: Pheromonal control of dealation and oogenesis in virgin queen fire ants. v212 p73–75 3 Apr 81.
Floyd-Smith, Georgia; Slattery, Elizabeth; Lengyel, Peter: Interferon action: RNA cleavage pattern of a (2'-5')oligoadenylate–dependent endonuclease. v212 p1030–1032 29 May 81.
Foege, William H. *See* Hopkins, Donald R.
Fossel, Eric T. *See* DeLayre, Jean L.
Fournie-Zaluski, Marie-Claude. *See* Patey, Gilles.
Fowler, J. *See* Greenberg, J. H.
Fox, Michael W.: Cattle breeding (letter). v212 p610 8 May 81.
Franey, J. P. *See* Graedel, T. E.
Frankel, R. B.; Blakemore, R. P.; Torres de Araujo, F. F.; Esquivel, D. M. S.; Danon, J.: Magnetotactic bacteria at the geomagnetic equator. v212 p1269–1270 12 June 81.

French, Vernon. *See* Bryant, Susan V.
Fried, Itzhak; Ojemann, George A.; Fetz, Eberhard E.: Language-related potentials specific to human language cortex. v212 p353–356 17 Apr 81.
Friedman, Robert. *See* DiMauro, Salvatore.
Friedman, Thomas B. *See* Johnson, Daniel H.
Frohman, Lawrence A. *See* Berelowitz, Michael.
Frost, James and Cummins, H. Z.: Motility assay of human sperm by photon correlation spectroscopy. v212 p1520–1522 26 June 81.
Frye, Northrop: The bridge of language. v212 p127–132 10 Apr 81.
Fuhrman, Frederick A.; Fuhrman, Geraldine J.; Nachman, Ronald J.; Mosher, Harry S.: Isoguanosine: isolation from an animal. v212 p557–558 1 May 81.
Fuhrman, Geraldine J. *See* Fuhrman, Frederick A.
Full, Robert J. *See* Herreid, Clyde F., II.
Furcinitti, Paul S. and Todd, Paul: Radiosensitivity of human cells in vitro (letter). v212 p6 3 Apr 81.
Furness, J. F. *See* Eskay, R. L.
Fuster, Joaquin M. and Jervey, John P.: Inferotemporal neurons distinguish and retain behaviorally relevant features of visual stimuli. v212 p952–955 22 May 81.

G

Gadek, J. E. *See* Hunninghake, G. W.
Galambos, Louis: review of *Knowledge*, by Fritz Machlup. v212 p775–776 15 May 81.
Game, J. C. *See* Resnick, M. A.
Gardner, Amy L. *See* Nguyen-Dinh, Phuc.
Garrard, T. L. *See* Vogt, R. E.
Gartner, S.: Terminal Cretaceous extinctions and the Arctic spillover model (technical comment). v212 p577–578 1 May 81.
Gassmann, G. *See* Müller, D. G.
Gautier, D. *See* Hanel, R.
Gazis, P. R. *See* Bridge, H. S.
Gazzaniga, Michael S. *See* Sidtis, John J.
Geary, Steven J.; Tourtellotte, Mark E.; Cameron, J. A.: Inflammatory toxin from *Mycoplasma bovis*: isolation and characterization. v212 p1032–1033 29 May 81.
Geiger, Kenneth R. *See* Parks, Norris J.
George, James W. *See* Wheeler, A. P.
Getz, Lowell L. *See* Oluzen, Dean E.
Gibbs, C. J., Jr. *See* Haase, A. T.
Gierasch, P. *See* Hanel, R.
Gilbert, John J.: review of *Biologie des Spongaires*, edited by Claude Lévi and Nicole Boury-Esnault. v212 p1022 29 May 81.
Gilbert, Lawrence E. *See* Williams, Kathy S.
Gill, Douglas E.: review of *Population Dynamics*, edited by R. M. Anderson, B. D. Turner, and L. R. Taylor. v212 p40–41 3 Apr 81.
Ginsburg, Victor. *See* Magnani, John L.
Gitlin, Kevin. *See* DiMauro, Salvatore.
Gloeckler, G. *See* Krimigis, S. M.
Gloer, James B. *See* Rinehart, Kenneth L., Jr.
Goeddel, David. *See* Lawn, Richard M.
Goertz, C. K. *See* Bridge, H. S.
Gold, Thomas and Soter, Steven: Natural explosive noises (technical comment). v212 p1297–1298 12 June 81.
Goldenberg, David M. and Pavia, Rose A.: Malignant potential of murine stromal cells after transplantation of human tumors into nude mice. v212 p65–67 3 Apr 81.
Goldman, Peter. *See* Green, Laura C.
Goldsmith, Marshall. *See* Zenick, Harold.
Goldstein, Joseph L. *See* Brown, Michael S.
Gonzalez, M. F. and Deutsch, J. A.: Vagotomy abolishes cues of satiety produced by gastric distension. v212 p1283–1284 12 June 81.
Gordon, Phillip R. *See* Bloomer, William D.
Gottlieb, Michael and Dwyer, Dennis M.: Protozoan parasite of humans: surface membrane with externally disposed acid phosphatase. v212 p939–941 22 May 81.
Gould, James L. and Able, Kenneth P.: Human homing: an elusive phenomenon. v212 p1061–1063 29 May 81.
Govind, C. K. and Pearce, Joanne: Remodeling of multiterminal innervation by nerve terminal sprouting in an identifiable lobster motoneuron. v212 p1522–1524 26 June 81.
Graedel, T. E.; Kammlott, G. W.; Franey, J. P.: Carbonyl sulfide: potential agent of atmospheric sulfur corrosion. v212 p663–665 8 May 81.
Grant, Jonathan. *See* Coull, Bruce C.
Green, Laura C.; Tannenbaum, Steven R.; Goldman, Peter: Nitrate synthesis in the germfree and conventional rat. v212 p56–58 3 Apr 81.
Greenberg, J. H.; Reivich, M.; Alavi, A.; Hand, P.; Rosenquist, A.; Rintelmann, W.; Stein, A.; Tusa, R.; Dann, R.; Christman, D.; Fowler, J.; MacGregor, B.; Wolf, A.: Metabolic mapping of functional activity in human subjects with the [^{18}F]fluorodeoxyglucose technique. v212 p678–680 8 May 81.
Greene, G. Cliett. *See* Lyman, Charles P.
Greengard, Paul. *See* Nestler, Eric J.
Greenwald, Peter. *See* Janerich, Dwight T.
Gregor, Marsha E. *See* Parks, Norris J.
Griffin, Diane E. *See* Winkelstein, Jerry A.
Griffin, John W. *See* Winkelstein, Jerry A.
Grigg, Gordon C. *See* Taplin, Laurence E.
Grinker, Joel A. *See* Della-Fera, Mary Anne.
Grinsted, Jørgen. *See* Byskov, Anne Grete.
Grinvald, Amiram and Farber, Ira C.: Optical recording of calcium action potentials from growth cones of cultured neurons with a laser microbeam. v212 p1164–1167 5 June 81.
Grogan, Elizabeth. *See* Miller, George.
Gros, Claude. *See* Patey, Gilles.
Gross, Barry R.: Evolution and prediction (letter). v212 p738 15 May 81.
Gross, Mitchell. *See* Lawn, Richard M.
Grove, David D.: review of *In the Land of the Olmec*, by Michael D. Coe and Richard A. Diehl. v212 p808–810 15 May 81.
Guest, Avery M.: review of *Philadelphia*, edited by Theodore Hershberg. v212 p806–807 15 May 81.
Gunn, James E.: review of *Cosmologie Physique*, edited by Roger Balian, Jean Audouze, and David N. Schramm. v212 p154 10 Apr 81.
Gupta, C. M. and Mishra, G. C.: Transbilayer phospholipid asymmetry in *Plasmodium knowlesi*-infected host cell membrane. v212 p1047–1049 29 May 81.
Gurnett, D. A.; Kurth, W. S.; Scarf, F. L.: Plasma waves near Saturn: initial results from Voyager 1. v212 p235–239 10 Apr 81.
Gutowsky, H. S.: Federal funding of basic research: the red tape mill. v212 p636–641 8 May 81.

H

Haas, Jere D.: review of *Diet in Pregnancy*, by David Rush, Zena Stein, and Mervyn Susser. v212 p804–805 15 May 81.
Haase, A. T.; Ventura, P.; Gibbs, C. J., Jr.; Tourtellotte, W. W.: Measles virus nucleotide sequences: detection by hybridization in situ. v212 p672–675 8 May 81.
Hadden, Susan G.: review of *DDT: Scientists, Citizens, and Public Policy*, by Thomas R. Dunlap. v212 p1138 5 June 81.
Hagan, John. *See* Britton, Joseph C.
Hahn, P. *See* Dvorak, H. F.
Hall, J. E. *See* Stek, M., Jr.
Hallet, Bernard. *See* Iverson, Richard M.
Hamilton, D. C. *See* Krimigis, S. M.
Hamilton, William J., III. *See* Busse, Curt.
Hand, P. *See* Greenberg, J. H.
Hanel, R.; Conrath, B.; Flasar, F. M.; Kunde, V.; Maguire, W.; Pearl, J.; Pirraglia, J.; Samuelson, R.; Herath, L.; Allison, M.; Cruikshank, D.; Gautier, D.; Gierasch, P.; Horn, L.; Koppany, R.; Ponnamperuma, C.: Infrared observations of the Saturnian system from Voyager 1. v212 p192–200 10 Apr 81.
Hanify, Jennifer A.; Metcalf, Peter; Nobbs, Christopher L.; Worsley, Keith J.: Aerial spraying of 2,4,5-T and human birth malformations: an epidemiological investigation. v212 p349–351 17 Apr 81.
Hanken, James and Sherman, Paul W.: Multiple paternity in Belding's ground squirrel litters. v212 p351–353 17 Apr 81.
Hansen, Candice J. *See* Smith, Bradford A.
Harder, John D. and Fleming, Michael W.: Estradiol and progesterone profiles indicate a lack of endocrine recognition of pregnancy in the opossum. v212 p1400–1402 19 June 81.
Harris, Graham P.: review of *Primary Productivity in the Sea*, edited by Paul G. Falkowski. v212 p794–795 15 May 81.
Harris, R. Adron; Schmidt, Jim; Hitzemann, Barbara A.; Hitzemann, Robert J.: Phosphatidate as a molecular link between depolarization and neurotransmitter release in the brain. v212 p1290–1291 12 June 81.
Hartenstein, Roy: Sludge decompostion and stabilization. v212 p743–749 15 May 81.
Hartle, R. E. *See* Bridge, H. S.
Hassan, Fekri A.: Historical Nile floods and their implications for climatic change. v212 p1142–1145 5 June 81.
Hawkins, J. E., Jr. *See* Prosen, Cynthia A.
Hazum, Eli. *See* Chang, Kwen-Jen.
Heilbron, J. L.: review of *Development of Science Publishing in Europe*, edited by A. J. Meadows. v212 p776–777 15 May 81.
Heilman, Kenneth M. *See* Yanowitz, Joanne S.
Heinrich, Bernd: Energetics of honeybee swarm thermoregulation. v212 p565–566 1 May 81.
Heitkamp, Michael. *See* Brown, Olen R.
Heldmaier, Gerhard; Steinlechner, Stephan; Rafael, Johannes; Vsiansky, Pavel: Photoperiodic control and effects of melatonin on nonshivering thermogenesis and brown adipose tissue. v212 p917–919 22 May 81.
Hengartner, H. and Du Pasquier, L.: Somatic cell hybrids from frog lymphocytes and mouse myeloma cells. v212 p1034–1035 29 May 81.
Herath, L. *See* Hanel, R.
Herlyn, Meenhard. *See* Koprowski, Hilary.
Herreid, Clyde F., II; Prawel, David A.; Full, Robert J.: Energetics of running cockroaches. v212 p331–333 17 Apr 81.
Herschman, Arthur: Annual Meeting survey (AAAS). v212 p1133–1134 5 June 81.
Heston, Lee. *See* Miller, George.
Hickey, Leo J.: review of *Biostratigraphy of Fossil Plants*, edited by David L. Dilcher and Thomas N. Taylor. v212 p1021–1022 29 May 81.
Hinckley, Bern S. *See* Iverson, Richard M.
Hindman, Sally. *See* Pimentel, David.
Hinson, Riley E. *See* Siegel, Shepard.
Hintz, Raymond L. *See* Berelowitz, Michael.
Hitzemann, Barbara A. *See* Harris, R. Adron. *See also* Harris, R. Adron.
Hochachka, P. W.: Brain, lung, and heart functions during diving and recovery. v212 p509–514 1 May 81.
Hofer, R.; Njoku, E. G.; Waters, J. W.: Microwave radiometric measurements of sea surface temperature from the Seasat satellite: first results. v212 p1385–1387 19 June 81.
Hoff, Margaret. *See* Janerich, Dwight T.
Holberg, J. B. *See* Broadfoot, A. L.
Holbrook, Stephen R.; Sussman, Joel L.; Kim, Sung-Hou: Absence of correlation between base-pair sequence and RNA conformation. v212 p1275–1277 12 June 81.
Holden, Constance (news and comment): Academy protests human life bill and budget cuts. v212 p760–761 15 May 81. Breeder stumbles in House. v212 p905 22 May 81. DOE blocks mailing of "antinuclear" publication. v212 p144 10 Apr 81. Getting serious about strategic minerals. v212 p305–307 17 Apr 81. Heroin no better than

morphine as analgesic. v212 p145 10 Apr 81. Identifying the dangerous individual. v212 p310 17 Apr 81. Library of Medicine versus private enterprise. v212 p1125–1126 5 June 81. Mormons rebel on MX. v212 p904 22 May 81. Public's fear of Watt is environmentalists' gain. v212 p422 24 Apr 81. Senate commences hearings on "human life." v212 p648–649 8 May 81. UCLA designing big Agent Orange study. v212 p905 22 May 81.
Holloway, Frank A. *See* Devenport, Lynn D.
Hollweg, Joseph V.: review of *Solar and Interplanetary Dynamics*, edited by M. Dryer and E. Tandberg-Hanssen. v212 p787 15 May 81.
Holtzer, Howard. *See* Bennett, Gudrun S.
Holtzman, Jeffrey D. *See* Sidtis, John J.
Honjo, Susumu. *See* Thunell, Robert C.
Honn, Kenneth V. *See* Sloane, Bonnie F.
———; Cicone, Bruce; Skoff, Anne: Prostacyclin: a potent antimetastatic agent. v212 p1270–1272 12 June 81.
Hopkins, Carl D. and Bass, Andrew H.: Temporal coding of species recognition signals in an electric fish. v212 p85–87 3 Apr 81.
Hopkins, Donald R. and Foege, William H.: Guinea worm disease (letter). v212 p495 1 May 81.
Horn, L. *See* Hanel, R.
Hughes, Robert G., Jr. *See* Rinehart, Kenneth L., Jr.
Hui, S. W.; Stewart, T. P.; Boni, L. T.; Yeagle, P. L.: Membrane fusion through point defects in bilayers. v212 p921–923 22 May 81.
Hunninghake, G. W.; Davidson, J. M.; Rennard, S.; Szapiel, S.; Gadek, J. E.; Crystal, R. G.: Elastin fragments attract macrophage precursors to diseased sites in pulmonary emphysema. v212 p925–927 22 May 81.
Hunt, Garry E. *See* Smith, Bradford A.
Hunten, D. M. *See* Broadfoot, A. L.
Hurst, R. W. *See* Straughan, I. R.

I and J

Ingersoll, Andrew. *See* Smith, Bradford A.
Inglis, James and Lawson, J. S.: Sex differences in the effects of unilateral brain damage on intelligence. v212 p693–695 8 May 81.
Ingwall, Joanne S. *See* DeLayre, Jean L.
Innocenti, G. M.: Growth and reshaping of axons in the establishment of visual callosal connections. v212 p824–827 15 May 81.
Isbister, John L. *See* Brown, Gregory G.
Isogai, Akira. *See* Sakagami, Youji.
Iversen, Leslie L.: review of *The Role of Peptides in Neuronal Function*, edited by Jeffery L. Barker and T. G. Smith, Jr. v212 p1263 12 June 81.
Iverson, Richard M.; Hinckley, Bern S.; Webb, Robert M.; Hallet, Bernard: Physical effects of vehicular disturbances on arid landscapes. v212 p915–917 22 May 81.
Jablonski, David. *See* Lutz, Richard A.
Jacobs, Laurence S.: Alternative to peer review? (letter). v212 p1337 19 June 81.
Jacobs, Robert S. *See* Fenical, William.
Jaenicke, L. *See* Müller, D. G.
Jain, Anrudh K.: Population growth and energy use (letter). v212 p281 17 Apr 81.
James, Mark A. *See* Smith, Ronald D.
Janerich, Dwight T.; Burnett, William S.; Feck, Gerald; Hoff, Margaret; Nasca, Philip; Polednak, Anthony P.; Greenwald, Peter; Vianna, Nicholas: Cancer incidence in the Love Canal area. v212 p1404–1407 19 June 81.
Jarvis, J. U. M.: Eusociality in a mammal: cooperative breeding in naked mole-rat colonies. v212 p571–573 1 May 81.
Jeffery, William R.: review of *Growth and Differentiation in* Physarum polycephalum. v212 p1139 5 June 81.
Jervey, John P. *See* Fuster, Joaquin M.
Jezyk, P. *See* Bovée, K. C.
Johnson, Arvid: review of *The Scientific Ideas of G. K. Gilbert*, edited by Ellis L. Yochelson. v212 p790–791 15 May 81.
Johnson, Daniel H. and Friedman, Thomas B.: Purine resistant mutants of *Drosophila* are adenine phosphoribosyltransferase deficient. v212 p1035–1036 29 May 81.
Johnson, R. E.; Lanzerotti, L. J.; Brown, W. L.; Armstrong, T. P.: Erosion of Galilean satellite surfaces by Jovian magnetosphere particles. v212 p1027–1030 29 May 81.
Johnson, Torrence V. *See* Smith, Bradford A.
Johnston, Malcolm C. *See* Millicovsky, Guillermo.
Jordon, Richard H.: review of *Alaska Native Culture and History*, edited by Yoshinobu Kotani and William B. Workman. v212 p1260–1261 12 June 81.
Jukes, Thomas H.: Views on evolution, theory, and science (letter). v212 p1446 26 June 81.
Junge, Douglas: review of *Molluscan Nerve Cells*, edited by John Koester and John H. Byrne. v212 p803–804 15 May 81.
Jura, Michael: review of *Interstellar Molecules*, edited by B. H. Andrew. v212 p1262 12 June 81.

K

Kaars, Charles and Faber, Donald S.: Myelinated central vertebrate axon lacks voltage-sensitive potassium conductance. v212 p1063–1065 29 May 81.
Kaas, Jon H. *See* Sur, Mriganka.
Kabat, Loren G. *See* Zimbardo, Philip G.
Kaiser, M. L. *See* Warwick, J. W.
Kakela, Peter J.: Iron ore: from depletion to abundance. v212 p132–136 10 Apr 81.
Kalt, Marvin R.: Alternative to peer review? (letter). v212 p1335, 1337 19 June 81.
Kammlott, G. W. *See* Graedel, T. E.
Kapatos, Gregory and Kaufman, Seymour: Peripherally administered reduced pterins do enter the brain. v212 p955–956 22 May 81.
Kaplan, Ann E.; Weiss, Ellen R.; Byrne, Sharon T.; El-Torkey, Nabil M.; Margolis, Sam A.: Purified reduced nicotinamide adenine dinucleotide: responses to lactate dehydrogenase isozymes from three cell sources. v212 p553–555 1 May 81.
Kaplan, Howard L. *See* Zilm, Duane H.
Kaplan, I. R. *See* Straughan, I. R.
Kaplan, Jerry: Polypeptide-binding membrane receptors: analysis and classification. v212 p14–20 3 Apr 81.
Kaplan, Lawrence T. *See* Damp, Jonathan E.
Karplus, Robert. *See* Stage, Elizabeth K.
Kasimos, J. N. *See* Resnick, M. A.
Kater, S. B. *See* Bulloch, A. G. M.
Kauffman, Robert S. *See* Wolf, Jacqueline L.
Kaufman, Seymour. *See* Kapatos, Gregory.
Kaula, W. M. *See* Phillips, R. J.
Keath, E. P. *See* Krimigis, S. M.
Keir, Robin S. *See* Thunell, Robert C.
Kelly, Alison: Mathematical ability: is sex a factor? (letter). v212 p118 10 Apr 81.
Kerr, Richard A. (research news): Are ocean islands recycled ocean crust? v212 p1377 19 June 81. Gauging volcanic blast hazards not so simple. v212 p1259 12 June 81. A hot spot found, another discarded. v212 p1376–1377 19 June 81. How much oil? it depends on whom you ask. v212 p427–429 24 Apr 81. Magma chambers in the laboratory. v212 p528 1 May 81. More deep-sea hot springs in the Pacific. v212 p528–529 1 May 81. The mountain is behaving itself—for now. v212 p1258–1259 12 June 81. Nonmarine iridium anomaly linked to extinctions. v212 p1376 19 June 81. Pollution of the Arctic atmosphere confirmed. v212 p1013–1014 29 May 81. Rifts propagating in the Pacific. v212 p529 1 May 81. Volcanoes, quakes, and the connectedness of things. v212 p1258 12 June 81.
Khan, Shahnaz. *See* DiMauro, Salvatore.
Kidd, Charles V.: New academic positions: the outlook in Europe and North America. v212 p293–298 17 Apr 81.
Killian, Anthony. *See* Chang, Kwen-Jen.
Kim, Sung-Hou. *See* Holbrook, Stephen R.
King, Robert C.; Riley, Shawn F.; Cassidy, Joseph D.; White, Peachie E.; Paik, Yong K.: Giant polytene chromosomes from the ovaries of a *Drosophila* mutant. v212 p441–443 24 Apr 81.
Kitchell, Jennifer. *See* Clark, David L.
Kleiman, D. G.: review of *Olfaction in Mammals*, edited by D. Michael Stoddart. v212 p155–156 10 Apr 81.
Kleinbart, Fredric A. *See* Bennett, Gudrun S.
Knight, D. M.: review of *The Founders of Science at the British Museum, 1753–1900*, by A. E. Gunther. v212 p319 17 Apr 81.
Koch, Elizabeth A. *See* Downing, Stephen W.
Kofahl, Robert E.: Popper on Darwinism (letter). v212 p873 22 May 81.
Kolata, Gina Bari (research news): Advance in integer programming. v212 p31 3 Apr 81. Clinical trial of psychotherapies is under way. v212 p432–433 24 Apr 81. Littlewood conjecture resolved. v212 p30–31 3 Apr 81. Russian proves Van der Warden conjecture. v212 p31 3 Apr 81. (news and comment): Attempts to safeguard technology draw fire. v212 p523–524, 526 1 May 81. Jury exonerates Bendectin in Mekdeci case. v212 p647 8 May 81. Levy to leave NHLBI. v212 p145 10 Apr 81. (letter): Startling punctuation. v212 p495 1 May 81.
Koppany, R. *See* Hanel, R.
Koprowski, Hilary. *See* Magnani, John L.
———; Herlyn, Meenhard; Steplewski, Zenon; Sears, Henry F.: Specific antigen in serum of patients with colon carcinoma. v212 p53–55 3 Apr 81.
Kostiuk, Theodor. *See* Mumma, Michael J.
Kovanen, Petri T. *See* Brown, Michael S.
Krank, Marvin D. *See* Siegel, Shepard.
Kraus, John: Universe beyond the galaxies (letter). v212 p610 8 May 81.
Krimigis, S. M.; Armstrong, T. P.; Axford, W. I.; Bostrom, C. O.; Gloeckler, G.; Keath, E. P.; Lanzerotti, L. J.; Carbary, J. F.; Hamilton, D. C.; Roelof, E. C.: Low-energy charged particles in Saturn's magnetosphere: results from Voyager 1. v212 p225–231 10 Apr 81.
Krohn, Kenneth A. *See* Parks, Norris J.
Kuc, Joseph A. *See* Bostock, Richard M.
Kuentzel, Sandra L. *See* Rinehart, Kenneth L., Jr.
Kumar, S. *See* Broadfoot, A. L.
Kunde, V. *See* Hanel, R.
Kurth, W. S. *See* Gurnett, D. A.
Kuwahara, M. D. and Sparber, S. B.: Prenatal withdrawal from opiates interferes with hatching of otherwise viable chick fetuses. v212 p945–947 22 May 81.

L

LaGrone, Mark L. *See* Britton, Joseph C.
Lahiri, Sukhamay: Chemical modification of carotid body chemoreception by sulfhydryls. v212 p1065–1066 29 May 81.
Laine, Roger A. *See* Bostock, Richard M.
Lal, N. *See* Vogt, R. E.
Lammek, B. *See* Sawyer, W. H.
Lancaster, Jane B.: review of *Animal Tool Behavior*, by Benjamin B. Beck. v212 p1381–1382 19 June 81.
Lang, David J. *See* Chandrabose, Kuttikkat A.
Lanigan, P. M. *See* Mascie-Taylor, C. G. N.
Lanza, Robert P. *See* Epstein, Robert.
Lanzerotti, L. J. *See* Johnson, R. E. *See also* Krimigis, S. M.
Lardy, Nicholas: review of *The International Energy Relations of China*, by Kim Woodard. v212 p1019–1020 29 May 81.
Laudano, Andrew P. and Doolittle, Russell F.: Influence of calcium ion on the binding of fibrin amino terminal peptides to fibrinogen. v212 p457–459 24 Apr 81.
Lave, Lester B.: Conflicting objectives in regu-

lating the automobile. v212 p893–899 22 May 81.
Lawn, Richard M.; Adelman, John; Dull, Thomas J.; Gross, Mitchell; Goeddel, David; Ullrich, Axel: DNA sequence of two closely linked human leukocyte interferon genes. v212 p1159–1162 5 June 81.
Lawson, J. S. *See* Inglis, James.
Lazarus, A. J. *See* Bridge, H. S.
Lebovitz, Richard M. *See* Peroutka, Stephen J.
Lecacheux, A. *See* Warwick, J. W.
Leeds, Anthony. *See* Engelman, Edward.
Leeton, J. F. *See* Trounson, A. O.
Leguire, L. E.; Blake, R.; Sloane, M. E.: A novel illusion of bars made from triangles. v212 p1172–1175 5 June 81.
Leibowitz, Lila. *See* Engelman, Edward.
Lengyel, Peter. *See* Floyd-Smith, Georgia.
Leonard, Reid J. and Lisman, John E.: Light modulates voltage-dependent potassium channels in *Limulus* ventral photoreceptors. v212 p1273–1275 12 June 81.
Lepping, Ronald P. *See* Ness, Norman F.
Lerch, Irving A.: Effective international cooperation (letter). v212 p1085 5 June 81.
LeVay, S. *See* Sherk, H.
Levine, Regina. *See* Engelman, Edward.
Levy, G. S. *See* Tyler, G. L.
Levy, Jerome M. *See* Levy, Jerre.
Levy, Jerre and Levy, Jerome M.: Foot-length asymmetry, sex, and handedness (technical comment). v212 p1418–1419 19 June 81.
Lewin, Roger (research news): Bones of mammals' ancestors fleshed out. v212 p 1492 26 June 81. An experiment that had to succeed. v212 p767–769 15 May 81. Biggest challenge since the double helix. v212 p28–30, 32 3 Apr 81. Cultural diversity tied to genetic differences. v212 p908–910 22 May 81. How conversational are genes? v 212 p313–315 17 Apr 81. Tale of the orphaned genes. v212 p530 1 May 81.
Lewis, Robert E.: review of *Fleas*, edited by R. Traub and H. Starcke. v212 p913–914 22 May 81.
Li, Li H. *See* Rinehart, Kenneth L., Jr.
Liaw, H. M. *See* MacKay, R. Stuart.
Lichtblau, Leonard and Sparber, Sheldon B.: Opiate withdrawal in utero increases neonatal morbidity in the rat. v212 p943–945 22 May 81.
Lide, David R., Jr.: Critical data for critical needs. v212 p1343–1349 19 June 81.
Liebman, Jon C.: Alternative to peer review? (letter). v212 p1335 19 June 81.
Lindal, G. F. *See* Tyler, G. L.
Linick, S. *See* Broadfoot, A. L.
Lipinsky, E. S.: Chemicals from biomass: petrochemical substitution options. v212 p1465–1471 26 June 81.
Lisman, John E. *See* Leonard, Reid J.
Livingston, David M.: review of *Molecular Biology of Tumor Viruses*, edited by John Tooze. v212 p1139–1140 5 June 81.
Llados-Eckman, Carmen. *See* Beckman, Alexander L.
Long, Howard F.: Meeting requirements (letter). v212 p1214 12 June 81.
Long, R. T. *See* Eskay, R. L.
Lorenzo, Joseph A. and Raisz, Lawrence G.: Divalent cation ionophores stimulate resorption and inhibit DNA synthesis in cultured fetal rat bone. v212 p1157–1159 5 June 81.
Luchins, Abraham S. *See* Luchins, Edith H.
Luchins, Edith H. and Luchins, Abraham S.: Mathematical ability: is sex a factor? (letter). v212 p116, 118 10 Apr 81.
Lukowiak, Ken and Sahley, Christie: The in vitro classical conditioning of the gill withdrawal reflex of *Aplysia californica*. v212 p1516–1518 26 June 81.
Lundstedt, H.; Wilcox, J. M.; Scherrer, P. H.: Solar flare acceleration of solar wind: influence of active region magnetic field. v212 p1501–1502 26 June 81.
Lutz, Richard A. and Jablonski, David: Identification of living and fossil bivalve larvae (technical comment). v212 p1419 19 June 81.
Lyman, Charles P.; O'Brien, Regina C.; Greene, G. Cliett; Papafrangos, Elaine D.: Hibernation and longevity in the Turkish hamster *Mesocricetus brandti*.. v212 p668–670 8 May 81.
Lynch, Gary S. *See* Baudry, Michel.

M

MacGregor, B. *See* Greenberg, J. H.
Maciag, Thomas. *See* Weinstein, Robert.
Mack, Scherraine: Novel help for the handicapped (news and comment). v212 p26–27 3 Apr 81.
MacKay, R. Stuart and Liaw, H. M.: Dolphin vocalization mechanisms. v212 p676–678 8 May 81.
MacLarnon, A. M. *See* Mascie-Taylor, C. G. N.
Magnani, John L.; Brockhaus, Manfred; Smith, David F.; Ginsburg, Victor; Blaszczyk, Magdalena; Mitchell, Kenneth F.; Steplewski, Zenon; Koprowski, Hilary: A monosialoganglioside is a monoclonal antibody-defined antigen of colon carcinoma. v212 p55–56 3 Apr 81.
Maguire, W. *See* Hanel, R.
Maher, Timothy J. *See* Conlay, Lydia A.
Malin, M. C. *See* Phillips, R. J.
Malkin, Richard: review of *Photosynthesis*, by Roderick K. Clayton. v212 p1382 19 June 81.
Malloy, Craig. *See* DeLayre, Jean L.
Maltais, Lois J. *See* Beamer, Wesley G.
Mann, Alfred K.: review of *Probing Hadrons with Leptons*, edited by Giuliano Preparata and Jean-Jacques Aubert. v212 p656 8 May 81.
Manning, M. *See* Sawyer, W. H.
Margolis, Sam A. *See* Kaplan, Ann E.
Margon, Bruce: review of *X-Ray Astronomy*, edited by Riccardo Giacconi and Giancarlo Setti. v212 p1494–1495 26 June 81.
Marguia, Carlos A. Vega Y. *See* Smith, Ronald D.
Marner, F. *See* Müller, D. G.
Marshall, Eliot (news and comment): College students fail global awareness test. v212 p 525 1 May 81. Dallas Peck to head USGS. v212 p1484–1485 26 June 81. Edwards hears criticism from synfuels industry. v212 p525 1 May 81. ELF resurrected after drowning by Navy. v212 p644–645 8 May 81. Ethical risks in biomedicine. v212 p307–309 17 Apr 81. FDA sees no radiation risk in VDT screens. v212 p1120–1121 5 June 81. The Hmong: dying of culture shock? v212 p1008 29 May 81. Meltdown too hot for Maryland science center. v212 p524–525 1 May 81. MX lobotomized by Air Force, critic says. v212 p138 10 Apr 81. New A-bomb data shown to radiation experts. v212 p1364–1365 19 June 81. New A-bomb studies alter radiation estimates. v212 p900–903 22 May 81. Richard Garwin: defense adviser and critic. v212 p763–766 15 May 81. Soviet oil decline put off 3 years. v212 p1252–1253 12 June 81. UCLA reactor license challenged in hearings v212 p1484 26 June 81.
Marshall, Larry G.; Butler, Robert F.; Drake, Robert E.; Curtis, Garniss H.: Calibration of the beginning of the Age of Mammals in Patagonia. v212 p43–45 3 Apr 81.
Marshall, Larry G. *See* Zinsmeister, William J.
Marshall, Noel K. and Donchin, Emanuel: Circadian variation in the latency of brainstem responses and its relation to body temperature. v212 p356–358 17 Apr 81.
Martial, Joseph A. *See* Owerbach, David.
Marx, Jean L. (research news): Antibodies: getting their genes together. v212 p1015–1017 29 May 81. Gene control puzzle begins to yield. v212 p653–655 8 May 81. Natriuretic hormone linked to hypertension. v212 p1255–1257 12 June 81. (news and comment): Congressional confusion over "conception." v212 p423 24 Apr 81. More about cloned mice. v212 p145 10 Apr 81.
Mascarenhas, Affonso Da S., Jr. *See* Mollo-Christensen, Erik.
Mascie-Taylor, C. G. N.; MacLarnon, A. M.; Lanigan, P. M.; McManus, I. C.: Foot-length asymmetry, sex, and handedness (technical comment). v212 p1416–1417 19 June 81.
Masursky, Harold. *See* Smith, Bradford A.
Mathers, David A. *See* Barker, Jeffery L.
Mathis, Chester A. *See* Parks, Norris J.
Mathis, John S. *See* Cassinelli, Joseph P.
Matsui, Sei-ichi. *See* Shiraishi, Yukimasa.
Matthaei, Julie A.: review of *Women's Work and Family Values, 1920–1940*, by Winifred D. Wandersee. v212 p807–808 15 May 81.
Maugh, Thomas H., II (research news): Analgesic from mushrooms begins clinical trials. v212 p431 24 Apr 81. Angiogenesis inhibitors link many diseases. v212 p1374–1375 19 June 81. Another potential problem in drinking water. v212 p431 24 Apr 81. At $100 per hour, service is a big concern. v212 p153 10 Apr 81. Bound to provoke a reaction. v212 p1128–1129 5 June 81. Concentrations measured by delayed lasing. v212 p150 10 Apr 81. IBM now making analytical instruments. v212 p151 10 Apr 81. IR spectrophotometer wed to a microscope. v212 p151 10 Apr 81. Male "pill" blocks sperm enzyme. v212 p314 17 Apr 81. New chemicals promise larger crops. v212 p33–34 3 Apr 81. New ways to measure SO_2 remotely. v212 p152–153 10 Apr 81. New ways to use metals for arthritis. v212 p430–431 24 Apr 81. On the trail of a fire ant remedy. v212 p431 24 Apr 81. Starving in the midst of plenty. v212 p430 24 Apr 81.
Mazur, Allan: Evaluating the social sciences (letter). v212 p875 22 May 81.
McCann, Frances V.; Pettengill, Olive S.; Cole, James J.; Russell, Jerome A. G.; Sorenson, George D.: Calcium spike electrogenesis and other electrical activity in continuously cultured small cell carcinoma of the lung. v212 p1155–1157 5 June 81.
McClements, W. L. *See* Blair, D. G.
McConnell, J. C. *See* Broadfoot, A. L.
McCreery, Richard L.: Alternative to peer review? (letter). v212 p1335 19 June 81.
McDonald, F. B. *See* Vogt, R. E.
McEnroe, M. *See* Sawyer, W. H.
McEwen, Bruce S. *See* Nestler, Eric J.
McGill, G. E. *See* Phillips, R. J.
McGovern, J. Patrick. *See* Rinehart, Kenneth L., Jr.
McGue, Matthew. *See* Bouchard, Thomas J., Jr.
McIntyre, Andrew. *See* Ruddiman, William F.
McLachlan, John A. *See* Barrett, J. Carl.
McLaughlin, William H. *See* Bloomer, William D.
McManus, I. C. *See* Mascie-Taylor, C. G. N.
Metcalf, Peter. *See* Hanify, Jennifer A.
Metz, William D.: Ambitious energy project loses luster (news and comment). v212 p517–519 1 May 81.
Meyer, David L.: review of *Echinoderms: Present and Past*, edited by Michel Jangoux. v212 p436–437 24 Apr 81.
Michel, George F.: Right-handedness: a consequence of infant supine head-orientation preference? v212 p685–687 8 May 81.
Michod, Richard E.: review of *Evolution in Age-Structured Populations*, by Brian Charlesworth. v212 p154–155 10 Apr 81.
Miller, George; Grogan, Elizabeth; Heston, Lee; Robinson, James; Smith, Douglas: Epstein-Barr viral DNA: infectivity for human placental cells. v212 p452–455 24 Apr 81.
Millicovsky, Guillermo and Johnston, Malcolm C.: Maternal hyperoxia greatly reduces the incidence of phenytoin-induced cleft lip and palate in A/J mice. v212 p671–672 8 May 81.
Mills, Eric L.: review of *Evolution and Ecology of Zooplankton Communities*, edited by W. Charles Kerfoot. v212 p534–535 1 May 81.
Minard, P. *See* Stek, M., Jr.

Miner, E. D. *See* Stone, E. C.
Miranda, Armand F. *See* DiMauro, Salvatore.
Mishra, G. C. *See* Gupta, C. M.
Mitchell, Jim L. *See* Smith, Bradford A.
Mitchell, Kenneth F. *See* Magnani, John L.
Mollo-Christensen, Erik; Cornillon, Peter; Mascarenhas, Affonso Da S., Jr.: Method for estimation of ocean current velocity from satellite images. v212 p661–662 8 May 81.
Moody, D. B. *See* Prosen, Cynthia A.
Moore, J. Robert: review of *Underwater Minerals*, by D. S. Cronan. v212 p1262–1263 12 June 81.
Moos, H. W. *See* Broadfoot, A. L.
Morabito, L. A. *See* Synnott, S. P.
Moran, Daniel J.: Mathematical ability: is sex a factor? (letter). v212 p116 10 Apr 81.
Moran, Mary Ann. *See* Pimentel, David.
Morawetz, Herbert: Alternative to peer review? (letter). v212 p1337 19 June 81.
Morin, Peter J.: Predatory salamanders reverse the outcome of competition among three species of anuran tadpoles. v212 p1284–1286 12 June 81.
Morlan, Richard E. *See* Stanford, Dennis.
Morrison, David. *See* Smith, Bradford A.
Mosher, Harry S. *See* Fuhrman, Frederick A.
Mosier, Doyle T. *See* Echelle, Anthony A.
Mosley-Thompson, E. *See* Thompson, L. G.
Mosteller, Frederick: Taking science out of social science (editorial). v212 p291 17 Apr 81.
Mulkey, Timothy J. and Evans, Michael L.: Geotropism in corn roots: evidence for its mediation by differential acid efflux. v212 p70–71 3 Apr 81.
Müller, D. G.; Gassmann, G.; Boland, W.; Marner, F.; Jaenicke, L.: *Dictyota dichotoma*: identification of the sperm attractant. v212 p1040–1041 29 May 81.
Muller, Steven: Resources for research medicine (editorial). v212 p1219 12 June 81.
Mumma, Michael J.; Buhl, David; Chin, Gordon; Deming, Drake; Espenak, Fred; Kostiuk, Theodor; Zipoy, David: Discovery of natural gain amplification in the 10-micrometer carbon dioxide laser bands on Mars: a natural laser. v212 p45–49 3 Apr 81.

N

Nachman, Ronald J. *See* Fuhrman, Frederick A.
Nagao, Kenji; Yokoro, Kenjiro; Aaronson, Stuart A.: Continuous lines of basophil/mast cells derived from normal mouse bone marrow. v212 p333–335 17 Apr 81.
Nakashima, Hideaki; Perlman, Janine; Feldman, Jerry F.: Genetic evidence that protein synthesis is required for the circadian clock of *Neurospora*. v 212 p361–362 17 Apr 81.
Nasca, Philip. *See* Janerich, Dwight T.
Natarajan, K. V.: NSF and science education (letter). v212 p1085–1086 5 June 81.
Neimark, Edith D.: Fraud, science, and safeguards (letter). v212 p873 22 May 81.
Neirinckx, Rudi D. *See* Bloomer, William D.
Nelson, Gareth: Evolutionary confusion? (letter). v212 p6 3 Apr 81.
Nelson-Rees, W. A.; Daniels, D. W.; Flandermeyer, R. R.: Cross-contamination of cells in culture. v212 p446–452 24 Apr 81.
Ness, Norman F.; Acuña, Mario H.; Lepping, Ronald P.; Connerney, John E. P.; Behannon, Kenneth W.; Burlaga, Leonard F.; Neubauer, Fritz M.: Magnetic field studies by Voyager 1: preliminary results at Saturn. v212 p211–217 10 Apr 81.
Nestler, Eric J.; Rainbow, Thomas C.; McEwen, Bruce S.; Greengard, Paul: Corticosterone increases the amount of protein 1, a neuron-specific phosphoprotein, in rat hippocampus. v212 p1162–1164 5 June 81.
Neubauer, Fritz M. *See* Ness, Norman F.
Newcomb, Eldon H. and Tandon, Shiv R.: Uninfected cells of soybean root nodules: ultrastructure suggests key role in ureide production. v212 p1394–1396 19 June 81.
Nguyen-Dinh, Phuc; Gardner, Amy L.; Campbell, Carlos C.; Skinner, Jimmie C.; Collins, William E.: Cultivation in vitro of the vivax-type malaria parasite *Plasmodium cynomolgi*. v 212 p1146–1148 5 June 81.
Nicoli, David F. *See* Briggs, Jonathan.
Nicoll, R. A. and Alger, B. E.: Synaptic excitation may activate a calcium-dependent potassium conductance in hippocampal pyramidal cells. v212 p957–959 22 May 81.
Nixon, Robert K. *See* Brown, Gregory G.
Njoku, E. G. *See* Hofer, R.
Nobbs, Christopher L. *See* Hanify, Jennifer A.
Noller, Harry F. and Woese, Carl R.: Secondary structure of 16*S* ribosomal RNA. v212 p403–411 24 Apr 81.
Norman, Colin (news and comment): Energy conservation: the debate begins. v212 p424–426 24 Apr 81. Federal science policy jobs still unfilled. v212 p761 15 May 81. Inmos enters the 64K RAM race. v212 p642–644 8 May 81. Meet Dr. X, the Jackson Place science adviser. v212 p27 3 Apr 81. Protests help Argentinian physicist. v212 p1123 5 June 81. PURPA forces utilities to buy power. v212 p1480 26 June 81. Renewable power sparks financial interest. v212 p1479–1481 26 June 81. Resins raise problems for TMI cleanup. v212 p1252 12 June 81. R & D spending: the military's growing bite. v212 p646–647 8 May 81. Science adviser post has nominee in view. v212 p903–904 22 May 81. Snail darter's status threatened. v212 p761 15 May 81. Study says coal cheaper than nuclear. v212 p652 8 May 81. U.S. derails energy plan for Third World. v212 p21–24 3 Apr 81. White House nominates new science adviser. v212 p1007 29 May 81. World Bank puts off energy lending plans. v212 p1373 19 June 81.
Northcutt, R. Glenn. *See* Bodznick, David.
Novi, Anna M.: Regression of aflatoxin B_1–induced hepatocellular carcinomas by reduced glutathione. v212 p541–542 1 May 81.

O–Q

Oatley, Keith: review of *The Nature of Thought*, edited by Peter W. Jusczyk and Raymond M. Klein. v212 p536 1 May 81.
O'Brien, Regina C. *See* Lyman, Charles P.
O'Brien, Stephen J.: Owl monkey cell line (letter). v212 p1214 12 June 81.
Oddie, David. *See* Peters, Michael.
Ogilvie, K. W. *See* Bridge, H. S.
Ojemann, George A. *See* Fried, Itzhak.
Oksenberg, Michel: review of *Science in Contemporary China*, edited by Leo A. Orleans. v212 p770–772 15 May 81.
Okuda, Roy K. *See* Fenical, William.
Olbert, S. *See* Bridge, H. S.
Olson, Everett C.: review of *A Fossil-Hunter's Notebook*, by Edwin H. Colbert. v212 p798–799 15 May 81.
Orenstein, N. S. *See* Dvorak, H. F.
Orne, Emily Carota. *See* Waid, William M.
Orne, Martin T. *See* Waid, William M.
Orville, Richard E.: review of *Ball Lightning and Bead Lightning*, by James Dale Barry. v212 p535–536 1 May 81.
Osborn, Thomas R. *See* Crawford, William R.
Oshio, C. and Phillips, M. J.: Contractility of bile canaliculi: implications for liver function. v212 p1041–1042 29 May 81.
Oskarsson, M. *See* Blair, D. G.
Ostow, Mortimer: Depression study (letter). v212 p984 29 May 81.
Owen, Tobias. *See* Smith, Bradford A.
Owerbach, David; Rutter, William J.; Cooke, Nancy E.; Martial, Joseph A.; Shows, Thomas B.: The prolactin gene is located on chromosome 6 in humans. v212 p815–816 15 May 81.
Page, A. L. *See* Straughan, I. R.
Paik, Yong K. *See* King, Robert C.
Pang, P. K. T. *See* Sawyer, W. H.
Papafrangos, Elaine D. *See* Lyman, Charles P.
Parks, Norris J.; Krohn, Kenneth A.; Mathis, Chester A.; Chasko, Joseph H.; Geiger, Kenneth R.; Gregor, Marsha E.; Peek, Neal F.: Nitrogen-13–labeled nitrite and nitrate: distribution and metabolism after intratracheal administration. v212 p58–61 3 Apr 81.
Parloff, Morris P. *See* Waskow, Irene Elkin.
Patey, Gilles; De La Baume, Sophie; Schwartz, Jean-Charles; Groe, Claude; Roques, Bernard; Fournie-Zaluski, Marie-Claude; Soroca-Lucas, Evelyne: Selective protection of methionine enkaphalin released from brain slices by enkephalinase inhibition. v212 p1153–1155 5 June 81.
Pavia, Rose A. *See* Goldenberg, David M.
Pearce, J. B. *See* Warwick, J. W.
Pearce, Joanne. *See* Govind, C. K.
Pearl, J. *See* Hanel, R.
Pearsall, Deborah M. *See* Damp, Jonathan E.
Pedersen, M. *See* Warwick, J. W.
Peek, Neal F. *See* Parks, Norris J.
Pendergast, David M.: review of *Pre-Columbian Metallurgy of South America*, edited by E. P. Benson. v212 p435–436 24 Apr 81.
Perlman, Janine. *See* Nakashima, Hideaki.
Peroutka, Stephen J.; Lebovitz, Richard M.; Snyder, Solomon H.: Two distinct central serotonin receptors with different physiological functions. v212 p827–829 15 May 81.
Peters, C. F. *See* Synnott, S. P.
Peters, Michael; Petrie, Bruce; Oddie, David: Foot-length asymmetry, sex, and handedness (technical comment). v212 p1417–1418 19 June 81.
Petrie, Bruce. *See* Peters, Michael.
Pettengill, Olive S. *See* McCann, Frances V.
Pfefferkorn, Hermann W.: review of *Paleobotany*, by Thomas N. Taylor. v212 p796–797 15 May 81.
Phillips, M. J. *See* Oshio, C.
Phillips, Owen M.: review of *Evolution of Physical Oceanography*, edited by B. A. Warren and C. Wunsch. v212 p793–794 15 May 81.
Phillips, R. J.; Kaula, W. M.; McGill, G. E.; Malin, M. C.: Tectonics and evolution of Venus. v212 p879–887 22 May 81.
Pimentel, David; Moran, Mary Ann; Fast, Sarah; Weber, Georg; Bukantis, Robert; Balliett, Lisa; Boveng, Peter; Cleveland, Cutler; Hindman, Sally; Young, Martin: Biomass energy from crop and forest residues. v212 p1110–1115 5 June 81.
Pirraglia, J. *See* Hanel, R.
Pisoni, David B. *See* Remez, Robert E.
Poizner, Howard: Visual and "phonetic" coding of movement: evidence from American Sign Language. v212 p691–693 8 May 81.
Polednak, Anthony P. *See* Janerich, Dwight T.
Pollack, James B. *See* Smith, Bradford A.
Pollen, Daniel A. and Ronner, Steven F.: Phase relationships between adjacent simple cells in the visual cortex. v212 p1409–1411 19 June 81.
Pomphrey, R. B. *See* Broadfoot, A. L.
Ponnamperuma, C. *See* Hanel, R.
Porter, Karen Glaus and Robbins, Eleanora Iberall: Zooplankton fecal pellets link fossil fuel and phosphate deposits. v212 p931–933 22 May 81.
Potier, Michel. *See* Womack, James E.
Pottathil, Raveendran. *See* Chandrabose, Kuttikkat A.
Pough, F. Harvey. *See* Townsend, Daniel S.
Prawel, David A. *See* Herreid, Clyde F., II.
Preisman, Richard C. *See* Brown, Gregory G.
Price, Derek de S.: Multiple authorship (letter). v212 p986 29 May 81.
Price, Donald L. *See* Winkelstein, Jerry A.
Price, Harold A. *See* Brown, Gregory G.
Prosen, Cynthia A.; Moody, D. B.; Stebbins, W. C.; Hawkins, J. E., Jr.: Auditory intensity discrimination after selective loss of cochlear outer hair cells. v212 p1286–1288 12 June 81.
Pugesek, Bruce H.: Increased reproductive effort with age in the California gull (*Larus californicus*). v212 p822–823 15 May 81.
Quay, S. C. *See* Dvorak, H. F.
Querner, Ulrich. *See* Berthold, Peter.

R

Rafael, Johannes. *See* Heldmaier, Gerhard.
Rainbow, Thomas C. *See* Nestler, Eric J.
Raisz, Lawrence G. *See* Lorenzo, Joseph A.
Ramirez, Victor D. *See* Dluzen, Dean E.
Ray, S. L. *See* Basu, A. R.
Rees, Terry F. *See* Cleveland, Jess M.
Rehbock, Philip F.: review of *Sir Joseph Banks*, by Charles Lyte. v212 p319–320 17 Apr 81.
Reivich, M. *See* Greenberg, J. H.
Remez, Robert E.; Rubin, Philip E.; Pisoni, David B.; Carrell, Thomas D.: Speech perception without traditional speech cues. v212 p947–950 22 May 81.
Renis, Harold E. *See* Rinehart, Kenneth L., Jr.
Rennard, S. *See* Hunninghake, G. W.
Resnick, M. A.; Kasimos, J. N.; Game, J. C.; Braun, R. J.; Roth, R. M.: Changes in DNA during meiosis in a repair-deficient mutant (*rad* 52) of yeast. v212 p543–545 1 May 81.
Riley, Shawn F. *See* King, Robert C.
Riley, Vernon: Psychoneuroendocrine influences on immunocompetence and neoplasia. v212 p1100–1109 5 June 81.
Rinehart, Kenneth L., Jr.; Gloer, James B.; Hughes, Robert G., Jr.; Renis, Harold E.; McGovern, J. Patrick; Swynenberg, Everett B.; Stringfellow, Dale A.; Kuentzel, Sandra L.; Li, H.: Didemnins: antiviral and antitumor depsipeptides from a Caribbean tunicate. v212 p933–935 22 May 81.
Ring Group: Gulf Stream cold-core rings: their physics, chemistry, and biology. v212 p1091–1100 5 June 81.
Rintelmann, W. *See* Greenberg, J. H.
Ristic, Miodrag. *See* Smith, Ronald D.
Robbins, Eleanora Iberall. *See* Porter, Karen Glaus.
Robinson, Arthur L. (research news): How many solvents is the limit for HPLC. v212 p149–150 10 Apr 81. International competition drives DESY. v212 p1488–1491 26 June 81. Micromainframe is newest computer on a chip. v212 p 527–528, 530–531 1 May 81. Myriad ways to measure small particles. v212 p146–148, 152 10 Apr 81. Persistence pays off in the form of a new product. v212 p150–151 10 Apr 81. Rough going for lasers at the Pittsburgh Conference. v212 p148–149 10 Apr 81.
Robinson, James. *See* Miller, George.
Robock, Alan: The Mount St. Helens volcanic eruption of 18 May 1980: minimal climatic effect. v212 p1383–1384 19 June 81.
Roe, Eunice: Problems of publishing (letter). v212 p396 24 Apr 81.
Roelof, E. C. *See* Krimigis, S. M.
Ronner, Steven F. *See* Pollen, Daniel A.
Root-Bernstein, Robert: Evolution, theory, and science (letter). v212 p1446, 1448–1449 26 June 81.
Roques, Bernard. *See* Patey, Gilles.
Rosario, Virgilio: Cloning of naturally occurring mixed infections of malaria parasites. v212 p1037–1038 29 May 81.
Rose, David L. *See* Tully, Joseph G.
Rosenbloom, Richard S.: review of *Appropriate Technology and Social Values*, edited by Franklin A. Long and Alexandra Oleson. v212 p38 3 Apr 81.
Rosenquist, A. *See* Greenberg, J. H.
Rosenthal, Howard: review of *The Atom Besieged*, by Dorothy Nelkin and Michael Pollak. v212 p772–773 15 May 81.
Roth, Jesse: Least publishable unit (letter). v212 p494 1 May 81.
Roth, R. M. *See* Resnick, M. A.
Roy, Rustum: Alternative to peer review? (letter). v212 p1338–1339 19 June 81.
Rubin, Donald H. *See* Wolf, Jacqueline L.
Rubin, Emanuel. *See* Schanne, Francis A. X.
Rubin, Philip E. *See* Remez, Robert E.
Ruddiman, William F. and McIntyre, Andrew: Oceanic mechanisms for amplification of the 23,000-year ice-volume cycle. v212 p617–627 8 May 81.
Rudwick, Martin: review of *The Abyss of Time*, by Claude C. Albritton, Jr. v212 p792 15 May 81.
Russell, Jerome A. G. *See* McCann, Frances V.
Russell-Hunter, W. D.: Evolutionary studies (letter). v212 p281 17 Apr 81.
Ruth, Thomas J. *See* Bloomer, William D.
Rutter, William J. *See* Owerbach, David.
Ryder, Robin E.: review of *John von Neumann and Norbert Weiner*, by Steve J. Heims. v212 p1496 26 June 81.
Ryffel, Gerhart U. *See* Wahli, Walter.

S

Sagan, Carl. *See* Smith, Bradford A.
Saha, A. K. *See* Basu, A. R.
Sahley, Christie. *See* Lukowiak, Ken.
Saidel, Leo J. *See* Downing, Stephen W.
Saidel, William M. *See* Echteler, Stephen M.
Sakagami, Youji; Yoshida, Mitsuru; Isogai, Akira; Suzuki, Akinori: Peptidal sex hormones inducing conjugation tube formation in compatible mating type cells of *Tremella mesenterica*.. v212 p1525–1527 26 June 81.
Salk, P. L. *See* Yogeeswaran, G.
Salkoff, Lawrence and Wyman, Robert: Outward currents in developing *Drosophila* flight muscle. v212 p461–463 24 Apr 81.
Salo, Wilmar L. *See* Downing, Stephen W.
Samelson, Franz: review of *An Education in Psychology*, edited by Michael M. Sokal. v212 p777–778 15 May 81.
Samuelson, R. *See* Hanel, R.
Sandberg, Avery A. *See* Shiraishi, Yukimasa.
Sandberg, Michael A.; Berson, Eliot L.; Effron, Marc H.: Rod-cone interaction in the distal human retina. v212 p829–831 15 May 81.
Sandel, B. R. *See* Broadfoot, A. L.
Sarkar, S. N. *See* Basu, A. R.
Sata, Paul. *See* Yanowitz, Joanne S.
Savage, Blair D. *See* Cassinelli, Joseph P.
Savin, Samuel M. *See* Woodruff, Fay.
Savitzky, Alan H.: Hinged teeth in snakes: an adaptation for swallowing hard-bodied prey. v212 p346–349 17 Apr 81.
Sawyer, W. H.; Pang, P. K. T.; Seto, J.; McEnroe, M.; Lammek, B.; Manning, M.: Vasopressin analogs that antagonize antidiuretic responses by rats to the antidiuretic hormone. v212 p49–51 3 Apr 81.
Sayre, David. *See* Feder, Ralph.
Scanu, A. M. *See* Streuli, R. A.
Scarf, F. L. *See* Gurnett, D. A.
Schanne, Francis A. X.; Zucker, Amy H.; Farber, John L.; Rubin, Emanuel: Alcohol-dependent liver cell necrosis in vitro: a new model. v212 p338–340 17 Apr 81.
Schardt, A. W. *See* Vogt, R. E.
Schauble, J. J. *See* Warwick, J. W.
Schauf, C. L. *See* Smith, K. J.
Schechter, Alan N. *See* Dean, Ann.
Scherrer, P. H. *See* Lundstedt, H.
Schmidt, Jim. *See* Harris, R. Adron.
Schneider, Arthur B. *See* Dean, Ann.
Schneider, Bruce S. *See* Della-Fera, Mary Anne.
Schneider, Stephen H. *See* Barron, Eric J.
Schultze, Hans-Peter: review of *The Terrestrial Environment and the Origin of Land Vertebrates*, edited by A. L. Panchen. v212 p657–658 8 May 81.
Schwartz, Jean-Charles. *See* Patey, Gilles.
Scudder, J. D. *See* Bridge, H. S.
Sears, Henry F. *See* Koprowski, Hilary.
Segal, S. *See* Bovée, K. C.
Seidel, George E., Jr.: Cattle breeding (letter). v212 p610 8 May 81.
Seidel, Robert W.: review of *Reminiscences of Los Alamos, 1943–1945*, edited by Lawrence Badash, Joseph O. Hirschfelder, and Herbert P. Broida. v212 p781–782 15 May 81.
Seil, Fredrick J. and Blank, Nathan K.: Myelination of central nervous system axons in tissue culture by transplanted oligodendrocytes. v212 p1407–1408 19 June 81.
Servos, John W.: review of *History of Chemical Engineering*, edited by William F. Furter. v212 p773–774 15 May 81.
Seto, J. *See* Sawyer, W. H.
Sharpe, Arlene H. *See* Wolf, Jacqueline L.
Shashoua, Victor E. *See* Duffy, Charles.
Shea, William: review of *Galileo and the Art of Reasoning*, by Maurice A. Finocchiaro. v212 p780–781 15 May 81.
Shemansky, D. E. *See* Broadfoot, A. L.
Sheridan, Michael F. and Wohletz, Kenneth H.: Hydrovolcanic explosions: the systematics of water-pyroclast equilibration. v212 p1387–1389 19 June 81.
Sherk, H. and LeVay, S.: Visual claustrum: topography and receptive field properties in the cat. v212 p87–89 3 Apr 81.
Sherman, Paul W. *See* Hanken, James.
Shimizu, Yuzuru and Yoshioka, Masako: Transformation of paralytic shellfish toxins as demonstrated in scallop homogenates. v212 p547–549 1 May 81.
Shipman, Charles, Jr. *See* Drach, John C.
Shiraishi, Yukimasa; Matsui, Sei-ichi; Sandberg, Avery A.: Normalization by cell fusion of sister chromatid exchange in Bloom syndrome lymphocytes. v212 p820–822 15 May 81.
Shoemaker, Eugene. *See* Smith, Bradford A.
Shows, Thomas B. *See* Owerbach, David.
Sidtis, John J.; Volpe, Bruce T.; Holtzman, Jeffrey D.; Wilson, Donald H.; Gazzaniga, Michael S.: Cognitive interaction after staged callosal section: evidence for transfer of semantic activation. v212 p344–346 17 Apr 81.
Siegel, Shepard; Hinson, Riley E.; Krank, Marvin D.: Morphine-induced attentuation of morphine tolerance. v212 p1533–1534 26 June 81.
Siscoe, G. L. *See* Bridge, H. S.
Sittler, E. C. *See* Bridge, H. S.
Skinner, B. F.: Innovation in science teaching (letter). v212 p283 17 Apr 81. *See also* Epstein, Robert.
Skinner, Jimmie C. *See* Nguyen-Dinh, Phuc.
Skoff, Anne. *See* Honn, Kenneth V.
Slansky, R.: review of *Unification of the Fundamental Particle Interactions*, edited by Sergio Ferrara, John Ellis, and Peter van Nieuwenhuizen. v212 p1020–1021 29 May 81.
Slatkin, Montgomery: review of *The Mathematical Theory of Quantitative Genetics*, by M. G. Bulmer. v212 p320–321 17 Apr 81.
Slattery, Elizabeth. *See* Floyd-Smith, Georgia.
Sloane, Bonnie F.; Dunn, John R.; Honn, Kenneth V.: Lysosomal cathepsin B: correlation with metastatic potential. v212 p1151–1153 5 June 81.
Sloane, M. E. *See* Leguire, L. E.
Smith, B. A. *See* Synnott, S. P.
Smith, Bradford A.; Soderblom, Laurence; Beebe, Reta; Boyce, Joseph; Briggs, Geoffery; Bunker, Anne; Collins, Stewart A.; Hansen, Candice J.; Johnson, Torrence V.; Mitchell, Jim L.; Terrile, Richard J.; Carr, Michael; Cook, Allen F., II; Cuzzi, Jeffrey; Pollack, James B.; Danielson, G. Edward; Ingersoll, Andrew; Davies, Merton E.; Hunt, Garry E.; Masursky, Harold; Shoemaker, Eugene; Morrison, David; Owen, Tobias; Sagan, Carl; Veverka, Joseph; Strom, Robert; Suomi, Verner E.: Encounter with Saturn: Voyager 1 imaging science results. v212 p163–191 10 Apr 81.
Smith, David F. *See* Magnani, John L.
Smith, Douglas. *See* Miller, George.
Smith, Elizabeth K. *See* Baudry, Michel.
Smith, G. R. *See* Broadfoot, A. L.
Smith, Hugh H.: review of *Noguchi and His Patrons*, by Isabel R. Plesset. v212 p434–435 24 Apr 81.
Smith, Jeffrey L. Photovoltaics. v212 p1472–1478 26 June 81.
Smith, K. J. and Schauf, C. L.: Gallamine triethiodide (Flaxedil): tetraethylammonium- and pancuronium-like effects in myelinated nerve fibers. v212 p1170–1172 5 June 81.

Smith, Piers P. K. and Buseck, Peter R.: Graphite carbon in the Allende meteorite: a microstructural study. v212 p322–324 17 Apr 81.
Smith, R. Jeffrey (news and comment): Air pollution rule attacked. v212 p1485 26 June 81. Back into space with Columbia. v212 p419–420 24 Apr 81. Califano tells tales of the top post at HEW. v212 p142–144 10 Apr 81. DOD announces weapons buying reforms. v212 p1006 29 May 81. Exxon scraps motor device. v212 p311 17 Apr 81. FDA, NHTSA appointments. v212 p310–311 17 Apr 81. FDA plans action on sodium in foods. v212 p1373 19 June 81. High-cost lemons in the U.S. arsenal. v212 p309–310, 312 17 Apr 81. Human life bill arouses more opposition. v212 p1372–1373 19 June 81. It is illegal to say that one is sane. v212 p1373 19 June 81. Japanese agitated by nuclear plant spill. v212 p1145 5 June 81. Low-fat diet poses little or no cancer risk. v212 p1006–1007 29 May 81. Military plans for shuttle stir concern. v212 p520–521 1 May 81. OSHA shifts direction on health standards. v212 p1482–1483 26 June 81. Shuttle astronauts give report. v212 p647 8 May 81. Studies support bendectin safety claim. v212 p1485 26 June 81. Utilities choke on asthma research. v212 p1251, 1254 12 June 81. Watt carves up strip-mining policy. v212 p759–760, 762 15 May 81.
Smith, Ronald D.; James, Mark A.; Ristic, Miodrag; Aikawa, Masamichi; Marguia, Carlos A. Vega Y: Bovine babesiosis: protection of cattle with culture-derived soluble *Babesia bovis* antigen. v212 p335–338 17 Apr 81.
Smith, Sandra H. *See* Drach, John C.
Smylie, D. E.: review of *The Earth's Variable Rotation*, by Kurt Lambeck. v212 p786–787 15 May 81.
Snyder, Solomon H. *See* Peroutka, Stephen J.
Soderblom, Laurence. *See* Smith, Bradford A.
Song, Cheng-Shu. *See* Brown, Olen R.
Sonleitner, Frank J.: Evolution and prediction (letter). v212 p738 15 May 81.
Sorenson, George D. *See* McCann, Frances V.
Soroca-Lucas, Evelyne. *See* Patey, Gilles.
Soter, Steven. *See* Gold, Thomas.
Southard, Janice L. *See* Beamer, Wesley G.
Sparber, Sheldon B. *See* Kuwahara, M. D. *See also* Lichtblau, Leonard.
Spitzer, Robert H. *See* Downing, Stephen W.
Spohn, Herbert: review of *Works on the Foundations of Statistical Physics*, by Nikolai Sergeevich Krylov. v212 p784–785 15 May 81.
Spyraki, C. and Fibiger, H. C.: Intravenous self-administration of nomifensine in rats: implications for abuse potential in humans. v212 p1167–1168 5 June 81.
Squire, William: Fraud, science, and safeguards (letter). v212 p873, 875 22 May 81.
Stage, Elizabeth K. and Karplus, Robert: Mathematical ability: is sex a factor? (letter). v212 p114 10 Apr 81.
Stanford, Dennis; Bonnichsen, Robson; Morlan, Richard E.: The Ginsberg experiment: modern and prehistoric evidence of a bone-flaking technology. v212 p438–440 24 Apr 81.
Stanley, Julian C. *See* Benbow, Camilla Persson.
Stanton, Toni L. *See* Beckman, Alexander L.
Stebbins, W. C. *See* Prosen, Cynthia A.
Stein, A. *See* Greenberg, J. H.
Steinlechner, Stephan. *See* Heidmaier, Gerhard.
Stek, M., Jr.; Minard, P.; Dean, D. A.; Hall, J. E.: Immunization of baboons with *Schistosoma mansoni* cercariae attenuated by gamma irradiation. v212 p1518–1520 26 June 81.
Stemerman, Michael B. *See* Weinstein, Robert.
Steplewski, Zenon. *See* Koprowski, Hilary. *See also* Magnani, John L.
Sterling, Keir B.: review of *Grove Karl Gilbert*, by Stephen J. Pyne. v212 p789–790 15 May 81.
Stern, Nancy: review of *A History of Computing in the Twentieth Century*, edited by N. Metropolis, J. Howlett, and Gian-Carlo Rota. v212 p536–537 1 May 81.
Stewart, Clare A., Jr.: Chlorinated drinking water (letter). v212 p1086–1087 5 June 81.
Stewart, Margaret M. *See* Townsend, Daniel.
Stewart, T. P. *See* Hui, S. W.
Stierman, Donald J.: Natural explosive noises (technical comment). v212 p1296–1297 12 June 81.
Stiles, Edmund W.: review of *Migrant Birds in the Neotropics*, edited by Allen Keast and Eugene S. Morton. v212 p39–40 3 Apr 81.
Stone, E. C. *See* Vogt, R. E.
——— and Miner, E. D.: Voyager 1 encounter with the Saturnian system. v212 p159–163 10 Apr 81.
Storm, M. C. *See* Sudmeier, J. L.
Stossel, Thomas P. *See* Weitzman, Sigmund A.
Straughan, I. R.; Elseewi, A. A.; Page, A. L.; Kaplan, I. R.; Hurst, R. W.; Davis, T. E.: Fly ash-derived strontium as an index to monitor deposition from coal-fired power plants. v212 p1267–1269 12 June 81.
Streng, Evelyn: Population growth and energy use (letter). v212 p281–282 17 Apr 81.
Streuli, R. A.; Chung, J.; Scanu, A. M.; Yachnin, S.: Serum lipoproteins modulate oxygenated sterol insertion into human red cell membranes. v212 p1294–1296 12 June 81.
Stringfellow, Dale A. *See* Rinehart, Kenneth L., Jr.
Strobel, D. F. *See* Broadfoot, A. L.
Strom, Robert. *See* Smith, Bradford A.
Strupp, Hans H.: Depression study (letter). v212 p984, 986 29 May 81.
Sudmeier, J. L.; Bell, S. J.; Storm, M. C.; Dunn, M. F.: Cadmium-113 nuclear magnetic resonance studies of bovine insulin: two-zinc insulin hexamer specifically binds calcium. v212 p560–562 1 May 81.
Sugisaki, Ryuichi: Deep-seated gas emission induced by the earth tide: a basic observation for geochemical earthquake prediction. v212 p1264–1266 12 June 81.
Sullivan, J. D. *See* Bridge, H. S.
Sun, Marjorie (news and comment): Afghan casualties: ancient artworks. v212 p423 24 Apr 81. Amniocentesis: be prepared. v212 p1253 12 June 81. At long last, Linus Pauling lands NCI grant. v212 p1126–1127 5 June 81. Cancer institute passes first test in Senate. v212 p1122 5 June 81. CC43.7, sec. C-1 is answer, Schweiker says. v212 p422–423 24 Apr 81. Hatch batters NCI with Straus case. . . . v212 p1366–1367 19 June 81. Inmates sue to keep research in prisons. v212 p650–651 8 May 81. Interferon: no magic bullet against cancer. v212 p141–142 10 Apr 81. Koop as Surgeon General: to be or not to be. v212 p422 24 Apr 81. Koop nomination jeopardized. v212 p1007 29 May 81. Laetrile brush fire is out, scientists hope. v212 p758–759 15 May 81. News of bone research causes fracture. v212 p906–907 22 May 81.
Suomi, Verner E. *See* Smith, Bradford A.
Sur, Mriganka; Wall, John T.; Kaas, Jon H.: Modular segregation of functional cell classes within the postcentral somatosensory cortex of monkeys. v212 p1059–1061 29 May 81.
Sussman, Joel L. *See* Holbrook, Stephen R.
Suttles, Gerald D.: review of *Exploring the City*, by Ulf Hannerz. v212 p434 24 Apr 81.
Suzuki, Akinori. *See* Sakagami, Youji.
Swartz, Marc J.: review of *Soviet and Western Anthropology*, edited by Ernest Gellner. v212 p912–913 22 May 81.
Swynenberg, Everett B. *See* Rinehart, Kenneth L., Jr.
Synnott, S. P.: 1979J3: discovery of a previously unknown satellite of Jupiter. v212 p1392 19 June 81.
———; Peters, C. F.; Smith, B. A.; Morabito, L. A.: Orbits of the small satellites of Saturn. v212 p191–192 10 Apr 81.
Szabo, Marta. *See* Berelowitz, Michael.
Szapiel, S. *See* Hunninghake, G. W.

T

Tandon, Shiv R. *See* Newcomb, Eldon H.
Tannenbaum, Steven R. *See* Green, Laura C.
Tanzer, Marvin L. *See* Waite, J. Herbert.
Taplin, Laurence E. and Grigg, Gordon C.: Salt glands in the tongue of the estuarine crocodile. v212 p1045–1047 29 May 81.
Tapscott, Stephen J. *See* Bennett, Gudrun S.
Taylor, Thomas N. *See* Wagner, Cynthia A.
Taylor, William B., Jr. *See* Bezdek, Roger H.
Terrile, Richard J. *See* Smith, Bradford A.
Teyler, Timothy J. *See* Duffy, Charles.
Thoman, Evelyn B. *See* Becker, Patricia T.
Thomas, Mark A. *See* Drach, John C.
Thompson, David D. and Trinkaus, Erik: Age determination for the Shanidar 3 Neanderthal. v212 p575–577 1 May 81.
Thompson, L. G. and Mosley-Thompson, E.: Microparticle concentration variations linked with climatic change: evidence from polar ice cores. v212 p812–815 15 May 81.
Thompson, Robert: Rapid forgetting of a spatial habit in rats with hippocampal lesions. v212 p959–960 22 May 81.
Thompson, Starley L. *See* Barron, Eric J.
Thunell, Robert C.; Keir, Robin S.; Honjo, Susumu: Calcite dissolution: an in situ study in the Panama Basin. v212 p659–661 8 May 81.
Tobias, Sheila. *See* Tomizuka, Carl.
Todd, Paul. *See* Furcinitti, Paul S.
Tomchik, K. J. and Devreotes, P. N.: Adenosine 3',5'-monophosphate waves in *Dictyostelium discoideum*: a demonstration by isotope dilution–fluorography. v212 p443–446 24 Apr 81.
Tomizuka, Carl and Tobias, Sheila: Mathematical ability: is sex a factor? (letter). v212 p114 10 Apr 81.
Torres de Araujo, F. F. *See* Frankel, R. B.
Tourtellotte, Mark E. *See* Geary, Steven J.
Tourtellotte, W. W. *See* Haase, A. T.
Townsend, Daniel S.; Stewart, Margaret M.; Pough, F. Harvey; Brussard, Peter F.: Internal fertilization in an oviparous frog. v212 p469–471 24 Apr 81.
Trainor, J. H. *See* Vogt, R. E.
Trier, Jerry S. *See* Wolf, Jacqueline L.
Trinkaus, Erik. *See* Thompson, David D.
Trounson, A. O.; Leeton, J. F.; Wood, C.; Webb, J.; Wood, J.: Pregnancies in humans by fertilization in vitro and embryo transfer in the controlled ovulatory cycle. v212 p681–682 8 May 81.
Tully, Joseph G.; Rose, David L.; Yunker, Conrad E.; Cory, Jack; Whitcomb, Robert F.; Williamson, David L.: Helical mycoplasmas (spiroplasmas) from *Ixodes* ticks. v212 p1043–1045 29 May 81.
Turner, C. G., II, and Bird, J.: Dentition of Chilean paleo-Indians and peopling of the Americas. v212 p1053–1055 29 May 81.
Turner, R. Eugene: review of *Wetland Functions and Values*, edited by Philip E. Greeson, John R. Clark, and Judith E. Clark. v212 p795–796 15 May 81.
Turner, Shirley and Buseck, Peter R.: Todorokites: a new family of naturally occurring manganese oxides. v212 p1024–1027 29 May 81.
Tusa, R. *See* Greenberg, J. H.
Tuttle, Russell H.: review of *Lucy*, by Donald C. Johanson and Maitland A. Edey. v212 p798 15 May 81.
Tyler, G. L.; Eshleman, V. R.; Anderson, J. D.; Levy, G. S.; Lindal, G. F.; Wood, G. E.; Croft, T. A.: Radio science investigations of the Saturn system with Voyager 1: preliminary results. v212 p201–206 10 Apr 81.

U–W

Ullrich, Axel. *See* Lawn, Richard M.
Vande Woude, G. G. *See* Blair, D. G.
Vasyliunas, V. M. *See* Bridge, H. S.
Ventura, P. *See* Haase, A. T.
Vetter, Betty M.: Degree completion by women and minorities in sciences increases (AAAS): v212 p35 3 Apr 81.
Veverka, Joseph. *See* Smith, Bradford A.
Vianna, Nicholas. *See* Janerich, Dwight T.
Vogt, R. E.; Chenette, D. L.; Cummings, A. C.; Garrard, T. L.; Stone, E. C.; Schardt, A. W.; Trainor, J. H.; Lal, N.; McDonald, F. B.: Energetic charged particles in Saturn's magnetosphere: Voyager 1 results. v212 p231–234 10 Apr 81.
Volpe, Bruce T. *See* Sidtis, John J.
Vorhees, Charles V. *See* Brunner, Robert L.
Vsiansky, Pavel. *See* Heldmaier, Gerhard.
Wade, Nicholas (news and comment): Afghanistan: the politics of a tragicomedy. v212 p521–523 1 May 81. Cambridge biologists pursued by money. v212 p1122–1123 5 June 81. Galleon yields gold, silver, archeology. v212 p1486–1487 26 June 81. Gene therapy caught in more entanglements. v212 p24–25 3 Apr 81. Gene therapy pioneer draws Mikadoesque rap. v212 p1253 12 June 81. Gold pipettes make for tight lips. v212 p1368 19 June 81. How to keep your shirt—if you put it in genes. v212 p26 3 Apr 81. NIH committee sheds darkness on UCSD case. v212 p27 3 Apr 81. Physicists meet to honor Sakharov. v212 p756–757 15 May 81. Research on anomalies. v212 p27 3 Apr 81.
Wagner, Cynthia A. and Taylor, Thomas N.: Evidence for endomycorrhizae in Pennsylvanian age plant fossils. v212 p562–563 1 May 81.
Wahli, Walter; Dawid, Igor B.; Ryffel, Gerhart U.; Weber, Rudolf: Vitellogenesis and the vitellogenin gene family. v212 p298–304 17 Apr 81.
Waid, William M.; Orne, Emily Carota; Cook, Mary R.; Orne, Martin T.: Meprobamate reduces accuracy of physiological detection of deception. v212 p71–73 3 Apr 81.
Waite, J. Herbert and Tanzer, Marvin L.: Polyphenolic substance of *Mytilus edulis*: novel adhesive containing L-dopa and hydroxyproline. v212 p1038–1040 29 May 81.
Waldrop, M. Mitchell (research news): Let us now praise famous boojums. v212 p1378 19 June 81. Magnetic fusion in flux. v212 p1129–1130 5 June 81. Red star in orbit. v212 p317 17 Apr 81. Space science in the year of the shuttle. v212 p316–318 17 Apr 81. (news and comment): Columbia looks good, second launch announced. v212 p1007 29 May 81. Reagan fills top NASA posts. v212 p646 8 May 81.
Walker, Bailus, Jr.: OSHA policy for laboratories (letter). v212 p875 22 May 81.
Wall, John T. *See* Sur, Mriganka.
Walsh, John (news and comment): DOD funds more research in universities. v212 p1003–1004 29 May 81. A first brush with new broom at NAS. v212 p904–905 22 May 81. House science panel throws down gauntlet. v212 p144–145 10 Apr 81. A Manhattan Project postscript. v212 p1369–1371 19 June 81. New AAAS panel in national security field. v212 p647 8 May 81. No major change in OMB view of A-21. v212 p760 15 May 81. Nuclear policy on hold until after French vote. v212 p1372 19 June 81. Rostow nominated to head ACDA. v212 p646 8 May 81. RPI takes the high tech road. v212 p1005, 1008 29 May 81. Shunning cryptocensorship. v212 p1250 12 June 81. Technology transfer reappraised. v212 p902 22 May 81.
Walton, Barbara T.: Chemical impurity produces extra compound eyes and heads in crickets. v212 p51–53 3 Apr 81.
Wang, Richard Y.-H. *See* Ehrlich, Melanie.
Warwick, J. W.; Pearce, J. B.; Evans, D. R.; Carr, T. D.; Schauble, J. J.; Alexander, J. K.; Kaiser, M. L.; Desch, M. D.; Pedersen, M.; Lecacheux, A.; Daigne, G.; Boischot, A.; Barrow, C. H.: Planetary radio astronomy observations from Voyager 1 near Saturn. v212 p239–243 10 Apr 81.
Waskow, Irene Elkin and Parloff, Morris P.: Depression study (letter). v212 p984 29 May 81.
Waters, J. W. *See* Hofer, R.
Way, Anthony B.: Evolution and prediction (letter). v212 p737–738 15 May 81.
Webb, J. *See* Trounson, A. O.
Webb, Robert M. *See* Iverson, Richard M.
Weber, Georg. *See* Pimentel, David.
Weber, George. *See* Aoki, Takashi.
Weber, Rudolf. *See* Wahli, Walter.
Weinstein, Robert; Stemerman, Michael B.; Maciag, Thomas: Hormonal requirements for growth of arterial smooth muscle cells in vitro: an endocrine approach to atherosclerosis. v212 p818–820 15 May 81.
Weiss, Bernard: Food colors and behavior (technical comment). v212 p579 1 May 81.
Weiss, Ellen R. *See* Kaplan, Ann E.
Weitzman, Sigmund A. and Stossel, Thomas P.: Mutation caused by human phagocytes. v212 p546–547 1 May 81.
Wheeler, A. P.; George, James W.; Evans, C. A.: Control of calcium carbonate nucleation and crystal growth by soluble matrix of oyster shell. v212 p1397–1398 19 June 81.
Whitcomb, Robert F. *See* Tully, Joseph G.
White, Peachie E. *See* King, Robert C.
Wieser, W.: More history of calculus (letter). v212 p875 22 May 81.
Wightman, A. S.: review of *Mathematical Problems in Theoretical Physics*, edited by K. Osterwalder. v212 p785–786 15 May 81.
Wilcox, J. M. *See* Lundstedt, H.
Willer, Jean Claude; Dehen, Henri; Cambier, Jean: Stress-induced analgesia in humans: endogenous opioids and naloxone-reversible depression of pain reflexes. v212 p689–691 8 May 81.
Williams, Kathy S. and Gilbert, Lawrence E.: Insects as selective agents on plant vegetative morphology: egg mimicry reduces egg laying by butterflies. v212 p467–469 24 Apr 81.
Williamson, Brian: Same name, different spelling (letter). v212 p738 15 May 81.
Williamson, David L. *See* Tully, Joseph G.
Wilson, Donald H. *See* Sidtis, John J.
Winkelstein, Jerry A.; Cork, Linda Collins; Griffin, Diane E.; Griffin, John W.; Adams, Robert J.; Price, Donald L.: Genetically determined deficiency of the third component of complement in the dog. v212 p1169–1170 5 June 81.
Winograd, Isaac J.: Radioactive waste disposal in thick unsaturated zones. v212 p1457–1464 26 June 81.
Wirtshafter, David. *See* Davis, John D.
Woese, Carl R. *See* Noller, Harry F.
Wohletz, Kenneth H. *See* Sheridan, Michael F.
Wolf, A. *See* Greenberg, J. H.
Wolf, Alfred P. *See* Bloomer, William D.
Wolf, Jacqueline L.; Rubin, Donald H.; Finberg, Robert; Kauffman, Robert S.; Sharpe, Arlene H.; Trier, Jerry S.; Fields, Bernard N.: Intestinal M cells: a pathway for entry of reovirus into the host. v212 p471–472 24 Apr 81.
Wolff, Sidney C.: review of *The Brightest Stars*, by Cornelis de Jager. v212 p1139 5 June 81.
Womack, James E.; Yan, Denise Lu Shun; Potier, Michel: Gene for neuraminidase activity on mouse chromosome 17 near H-2: pleiotropic effects on multiple hydrolases. v212 p63–65 3 Apr 81.
Wong, Annette. *See* Barrett, J. Carl.
Wood, C. *See* Trounson, A. O.
Wood, G. E. *See* Tyler, G. L.
Wood, J. *See* Trounson, A. O.
Wood, T. G. *See* Blair, D. G.
Woodruff, Fay; Savin, Samuel M.; Douglas, Robert G.: Miocene stable isotope record: a detailed deep Pacific Ocean study and its paleoclimatic implications. v212 p665–668 8 May 81.
Woolfenden, Glen E.: review of *Papers in Avian Paleontology Honoring Hildegarde Howard*, edited by Kenneth E. Campbell, Jr. v212 p799–800 15 May 81.
Wooster, Warren S.: Ocean research under foreign jurisdiction. v212 p754–755 15 May 81.
Worsley, Keith J. *See* Hanify, Jennifer A.
Wright, Thomas L.: review of *Physics of Magmatic Processes*, edited by R. B. Hargreaves. v212 p656–657 8 May 81.
Wu, Jin: Evidence of sea spray produced by bursting bubbles. v212 p324–326 17 Apr 81.
Wunsch, Carl: review of *Oceanography: The Past*, edited by M. Sears and D. Merriman. v212 p792–793 15 May 81.
Wurtman, Richard J. *See* Conlay, Lydia A.
Wyatt, Philip J.: Days of wine and lasers (letter). v212 p1212–1214 12 June 81.
Wyman, Robert. *See* Salkoff, Lawrence.

Y and Z

Yachnin, S. *See* Streuli, R. A.
Yan, Denise Lu Shun. *See* Womack, James E.
Yanowitz, Joanne S.; Sata, Paul; Heilman, Kenneth M.: Foot-length asymmetry, sex, and handedness (technical comment). v212 p1418 19 June 81.
Yeagle, P. L. *See* Hui, S. W.
Yogeeswaran, G. and Salk, P. L.: Metastatic potential is positively correlated with cell surface sialylation of cultured murine tumor cell lines. v212 p1514–1516 26 June 81.
Yokoro, Kenjiro. *See* Nagao, Kenji.
Yoshida, Mitsuru. *See* Sakagami, Youji.
Yoshikami, Doju: Transmitter sensitivity of neurons assayed by autoradiography. v212 p929–930 22 May 81.
Yoshioka, Masako. *See* Shimizu, Yuzuru.
Youatt, J. B. and Brown, R. D.: Origins of chirality in nature: a reassessment of the postulated role of bentonite. v212 p1145–1146 5 June 81.
Young, Martin. *See* Pimentel, David.
Yunker, Conrad E. *See* Tully, Joseph G.
Zajonc, R. B.: Social science budget cuts (letter). v212 p396 24 Apr 81.
Zeisel, Hans: Popper on Darwinism (letter). v212 p873 22 May 81.
Zenick, Harold and Goldsmith, Marshall: Drug discrimination learning in lead-exposed rats. v212 p569–571 1 May 81.
Zikakis, J. P. *See* Austin, P. R.
Zilm, Duane H.; Kaplan, Howard L.; Capell, Howard: Electroencephalographic tolerance and abstinence phenomena during repeated alcohol ingestion by nonalcoholics. v212 p1175–1177 5 June 81.
Zimbardo, Philip G.; Andersen, Susan M.; Kabat, Loren G.: Induced hearing deficit generates experimental paranoia. v212 p1529–1531 26 June 81.
Zinsmeister, William J.; Marshall, Larry G.; Drake, Robert E.; Curtis, Garniss H.: First radioisotope (potassium-argon) age of marine Neogene Rionegro beds in northeastern Patagonia, Argentina. v212 p440 24 Apr 81.
Zipoy, David. *See* Mumma, Michael J.
Zucker, Amy H. *See* Schanne, Francis A. X.
Zuk, William: review of *Long-Span Bridges*, edited by Edward Cohen and Blair Birdsell. v212 p787–788 15 May 81.